

# The YOUTH'S INSTRUCTOR

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No. 25



*Painted by L. E. Adan*

SUMMER EVENING







LUTHER BURBANK was born in Lancaster, Massachusetts.

FIFTY-FOUR deaths have already been recorded in the history of aviation.

"THE four boxes that rule the world — cartridge-box, ballot-box, jury-box, and bandbox."

LIMA, Peru, has opened a national aviation school, under the patronage of the federal government.

THE English and American governments have decided to undertake a joint work of recharting or remapping the oceans of the world.

A SOLUTION of a certain form of lime has been found to sterilize the water of swimming-pools in an hour, without affecting the taste or odor.

SOME one has given the valuable suggestion that the boys of the church keep a table supplied with reading-matter in the town's barber shop. Many men would like to read while waiting for service.

THE power of steam is indicated in the fact that "a plain cylindrical boiler of average size, with steam at one hundred pounds' pressure and filled with water to the proper level, has sufficient energy to project the boiler to a height of three and one-half miles."

"SIR WILLIAM WILLCOCKS, commissioned by the Turkish government to prepare a scheme for the irrigation of Mesopotamia, declares that the destructive headwaters of the Euphrates can be conserved and utilized in such a way as to redeem and irrigate 6,000,000 acres of land. The cost of the enterprise would amount to some \$5,000,000."

COL. THOMAS WENTWORTH HIGGINSON, almost the last of the great group of authors that has made New England famous, died recently, at the age of eighty-seven, in his native city, Cambridge, Massachusetts. Hannah Whitall Smith, author of "The Christian's Secret of a Happy Life," together with other books of equal merit, also died recently in Oxford, England, at the age of eighty.

A COPYRIGHTED cablegram from Madrid to the New York *World* says that "despite previous official denials, the *World* correspondent is able to state on positive authority that Don Jaime, the second son of the king and queen of Spain, has been dumb from birth, and is deficient in hearing, though not totally deaf. The queen has arranged to take him shortly to a celebrated Swiss specialist to determine whether the infirmity can be cured by an operation."

"EGYPT's great sphinx, guarding the second pyramid, is now said to be a monument to King Chephren, and the head to be a portrait of this king. This was discovered four years ago by Professor Reisner, who directed the work of excavation in the neighborhood of the pyramid and the sphinx. He has recently returned to this country, and not long ago explained that the resemblance between the head of the sphinx and certain undoubted portrait busts of Chephren, which he had found, made it certain that the riddle had at last been solved. It has long been held by antiquarians that Chephren built the sphinx, but it was supposed to be a monument to Harmachis, a special form of the sun-god."

"THE average mortal's cranium is a rather dainty affair, less than a quarter of an inch in thickness; but a solid half inch of good, honest bone shields Jack Johnson's brain from the unkind world. The common or garden variety of X-rays can penetrate the average mortal's skull in ten or fifteen seconds; but the same rays had about five minutes of hard work doing the same thing for the brain of the world's champion heavy-weight pugilist."

### The Passing of Diaz

ON the twenty-sixth of May, 1911, in the dead of night, Porfirio Diaz, the one who has held the presidency of Mexico since 1876, with the exception of four years, stole away from his residence, fled to Vera Cruz, and took ship for Spain, having resigned his office the day previous.

Francisco Leon de la Barra, formerly ambassador at Washington, afterward Mexican Minister of Foreign Affairs, was made provisional president on the resignation of Diaz.

Madero, the leader of the revolutionists, promises the people justice, equally for the rich and the poor. He will be a candidate for the presidency in the autumn election.

### Contrast

I WALKED across the fields, and played  
A merry, merry tune  
Upon my new harmonica,  
One sunny day in June.

A bird was sitting on a limb,  
But him I did not see;  
He swelled his speckled throat, and burst  
Into a melody.

I ceased my music then to play,  
Unto his song to hark.  
I looked, and spied him on a limb,—  
A joyous meadow-lark.

Again my tune to play I tried,—  
My merry, merry tune;  
But all the grace from it had fled  
That sunny day in June.

JULIA ROSS.

LET it fill you with cheerfulness and exalted feeling that God is leading you on, girding you for a work, preparing you for a good that is worthy of his divine magnificence. If God is really preparing us all to become that which is the very highest and best possible, there ought never to be a discouraged or uncheerful being in the world.—*Horace Bushnell.*

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# The Youth's Instructor

VOL. LIX

TAKOMA PARK STATION, WASHINGTON, D. C., JUNE 20, 1911

No. 25

## Extracts From a Missionary's Diary

W. J. TANNER



JANUARY 14.—I left home on my first trip to the interior of Haiti by the morning train from Cape Haitien, and must say that the trains of *Chemin de fer du Nord*, as the railroad is called, are not to be compared with our American "flyers." In the first place, the gage of this road is narrow, and the engines are small and primitive-looking. An ordinary flat car, on which had been placed the body of an old-time horse-car, served for all who could enjoy the luxury of traveling first class. All others traveled on flat cars, minus the street-car body and seats. The train crew, like the train itself, had a dilapidated appearance, and it seemed strange to me that the black engineer should be known as *conducteur*, and the pompous individual of the same complexion who collected the fares, as *commissaire*. I spent ten minutes trying to convince a fellow passenger that this was wrong, at least so far as the title of conductor was concerned, but was met with the argument that the engineer, because of the fact that he rides at the head of the train and has control of its movements, is in reality the conductor.

It was interesting to see the dusky crew get the train started. This began with a lot of shouting and confusion about leaving time, and the noise and excitement gradually grew more and more intense until at last off we started with a jerk, thirty minutes late. Whether they count the train as starting from the time they begin shouting, or from the time it moves off, I can not say. This is a country of strange customs and ideas.

After wending our way over sunny plain and through tropical forest and valley at the exhilarating speed of ten miles an hour, we arrived in due time at Grande Rivière, seventeen miles away. We shall remain here until to-morrow morning, when we expect to get an early start for Ranquitte.

JANUARY 15.—Well, we got our early morning start at nine o'clock. It seems to be a custom here to postpone doing a thing from two to three hours after the time first set to do it, if it is an appointment where hours are concerned, and two or three days later when it is a matter of days. We were but seven horsemen strong when we started; but four more overtook us before the day was over. It seems that all the male Protestants in the vicinity who can command a horse or mule are going along to escort the new *pastem adventiste*.

For the first fifteen or twenty miles our course lay through the Grande Rivière valley, and we were obliged to cross and recross the river of the same name thirteen times during the day. As there were no bridges, and as the stream is swift and its bottom rough at some of the fords, the experience was interesting, to say the least.

On leaving the valley we went up into the mountains two or three thousand feet, and arrived at Ranquitte at half past three in the afternoon. Three

hours later dinner was announced, and we all sat down before a large dish of boiled rice. As guest of honor, I had two small rolls of baker's bread that some one happened to have in his pocket. Although very hungry from the long ride, I was unable to partake of the rice, owing to the fact that it was heavily seasoned with red pepper. The rolls and a cup of good cool water served me very well, however.

JANUARY 16.—We arose at three in the morning and left Ranquitte an hour later for Naron, where we arrived in the middle of the forenoon. Here we found our pack-mule, which by mistake had not stopped at Ranquitte the day before, and so I was able to get a good breakfast, to which I did full justice.

This evening I held a meeting with the candidates for baptism, four in number, after which Frère Isaac preached on the seventh chapter of Daniel to a good congregation. The meetings are held in a private house, with an interested audience.

JANUARY 17, SABBATH.—On arising this morning I felt the symptoms of fever. At nine I performed a marriage ceremony for two couples,—the candidates for baptism,—and then, after a sermon, we retired to a near-by pool to celebrate the latter ordinance. By this time I felt the fever coming on, but not wishing to disappoint the candidates, who had been waiting for baptism for some time, I committed myself to God's keeping, and entering the water, performed the ceremony. The fever left me about six o'clock, but I was too weak to do anything except give the communion. The Lord came very near in this service. Frère Isaac took charge of the remainder of the meetings.

JANUARY 19.—Instead of continuing the trip to Pignon, as we had planned, I thought it best to return home. When we reached Ranquitte, at ten o'clock, my fever was beginning to rise again; and when I asked for water, the friends brought it to me hot, saying that cool water is not good for people with fever. Not feeling disposed to argue the matter, I partook of what they brought. This, however, together with the sun, which was beating down on my back, only served to cause my temperature to rise furiously, until I began to fear that I might lose consciousness. By this time, too, I was beginning to feel extremely thirsty. My request for cold water was met with a refusal. My Haitien friends were no doubt seeking my best interest as they understood it; for they solemnly told me they were afraid I would die in the road if I should do the unheard-of thing of drinking cold water while having fever. So, seeing that they were resolved that I should have none, and knowing that with the fever rising all the time I should not be able to keep to my saddle much longer, I dismounted, and seating myself by the roadside refused to leave until plenty of fresh water should be procured for me. After consulting among themselves a few moments, one of the party went off to a near-by house and soon re-



turned with a calabash of that refreshing liquid that alone can quench the burning thirst. This seemed to arrest the progress of the fever, and the rest of the journey my companions watched me rather narrowly, as if they thought that I might at any time fall from my horse as a result of my indiscretion. When we reached the river, I drank again, and also several times while crossing it; and when we arrived at Grande Rivière, the fever had greatly subsided, and I was a wonder to everybody.

JANUARY 22.—I have reached home. Fever came up again to-day, but I expect, with treatment and rest, to be all right again in a few days.

NOTE.—Since this circumstance, which happened several years ago, our people in Haiti have learned many things that they did not know before, and among others, the fact that water is very necessary in fevers.

### God's Grace and God's Law Not Antagonistic

A FEW evenings ago I had a friendly chat with a believer in holiness. After he had emphasized his sinlessness, I asked:—

"What is sin?"

Immediately came the reply, "Transgression of the law of God."

"Being sinless, you are therefore in perfect harmony with the law?"

"I praise God, this is my experience."

"Then you are an observer of the seventh-day Sabbath, as this is the day set apart as sacred by the commandment?"

"I am not under the law; I am under grace."

"What does God's grace do for you?"

"Saves me from sin."

"You said sin is the transgression of the law. By your violation of the fourth commandment, are you not, in your experience, making of no effect the grace of God?"

"I have the mind of Christ, not the mind of Moses."

"Then your carnal-mindedness is a thing of the past."

"It has been nailed to the cross."

"The carnal mind is enmity against God: for it is not subject to the law of God.' If the carnal mind has been entirely eliminated, why do you rebel against the law of God?"

"The word law means love; I have the law of love in my heart."

"Ye are not under the law, but under grace.' What does the word law mean in this verse?"

"It means the old Jewish law, the law of Moses."

"Is not this playing fast and loose with the Scriptures? The same word used by the same writer in one text means one thing and in another text something altogether different."

"I am a Christian, not a Jew. The Sabbath is purely a Jewish institution, not having been in existence until the exodus of Israel from Egypt."

"M-a-n does not spell Jew. 'The Sabbath was made for man' (Mark 2:27), which is a universal term. The woman was made for man; do you confine her to the Jewish people? Are you married?"

"Yes."

"Have you not, therefore, another man's wife? for if the Sabbath was made for man, and woman was made for man, and man means Jew, then no one has a right to the woman but the Jew."

"Law can never save us."

"No one believes that it can. It condemns; it makes the offense to abound; it can not justify, make righteous, save. The Lord Jesus saves us from sin, not in sin."

"I have the evidence in my soul that I am saved, and I will have nothing to do with the Sabbath."

"Do you believe the Romanist is wrong when he bows the knee to an image?"

"Certainly he is."

"I go to him, and in a friendly way seek to point out his error, and lead him to Christ. I read to him the second commandment, which he is transgressing. Instantly he replies, 'I am not under the law; I am under grace; I will have nothing to do with the law.' What do you say about him?"

"Why, he rejects the grace of God."

"Then when you do with the fourth commandment exactly what the Romanist does with the second, do not you also reject the grace of God, and are you not in bondage to the law just as truly as the Romanist?"

He walked away, apparently having obtained a new glimpse of the relationship existing between the law and God's grace. May the seed bring forth fruit, eliminating the spirit of lawlessness from his life.

Many other excuses are adopted by those who are unwilling to yield obedience to the Sabbath of creation and redemption, among them being this one: "Where is the New Testament text commanding Gentiles to keep the seventh-day Sabbath?" Christ came into the world, not to enact laws, but to fulfil them, and by so doing provide a righteousness which he could impart to those who had transgressed law. This question is pertinent in reply to the foregoing evasion of the truth: "Where is the New Testament text declaring that God made a covenant with the Gentiles?" Such a text can not be found; hence are we to conclude that Gentiles are divorced entirely from the salvation of God? The Gentiles are said to be "strangers from the covenants of promise, having no hope, and without God in the world." Eph. 2:12.

God's method of saving Gentiles is very clear, and easily understood. The new covenant, which brings salvation to all men, was made with Israel. "I will make a new covenant with the house of Israel and with the house of Judah." Heb. 8:8. None but Israelites will be saved. Rom. 11:26. Those born after the flesh are not Israelites (Rom. 9:6-8); only those are Israelites who are born of the Spirit (Rom. 9:8; 2 Peter 1:4; Rom. 2:28, 29; Gal. 3:29; 4:28-31). Every man born of the Spirit is "an Israelite indeed, in whom is no guile;" being Christ's, he is Abraham's seed (Gal. 3:7, 29).

This same truth is taught by James, who in writing to Christians, addresses them as "the twelve tribes which are scattered abroad." James 1:1. God has a tree which he intends to transplant into the eternal kingdom of Jesus Christ; the natural branches, by rejecting Christ, were broken off (Rom. 11:17). God's tree must be perfect, hence the place made vacant by these natural branches is taken by the Gentiles (Rom. 11:17-21), who thus become Israelites, united to the parent stock, that the fruits of righteousness may be revealed in the life. That tree will have its complement of branches, and when its fruit is ripened, it will be transplanted into eternity. Only those who are part of it will be saved; and so (in this manner, by grafting the Gentiles into the parent stock) all Israel shall be saved.



The New Jerusalem, the capital of Christ's kingdom, has twelve gates, twelve foundations, and the names of the twelve tribes and of the twelve apostles are written on it; its tree bears twelve manner of fruits — making manifest again the truth that all the saved are Israel. In the kingdom these redeemed ones will keep the seventh-day Sabbath. Isa. 66:22, 23. What joy it will be when all Israel will gather before God each Sabbath day and worship him face to face, when God's voice shall be heard singing of his great joy in having all his children with him; and what a halleluiahs will roll back to the throne of the Eternal from the lips of the redeemed as they sing of their love for him who redeemed them with his own blood! What a satisfying feast when each month they will eat of the fruit of the tree of life! Because of sin, the first Adam was deprived of this privilege, which will then be restored through the second Adam. If Israelites should keep the Sabbath, which all admit, so should Christians, as all Christians are Israelites. Are you an Israelite or a Gentile? are you in the flesh or in the Spirit? are you Christ's or are you still rejecting him? In God's name turn to him, and although wild by nature, he will destroy that nature, give you his own, graft you into the tree composed entirely of Israelites, and the result will be the fruits of righteousness, the "righteousness of the law," which will be fulfilled in you by the Holy Spirit. Rom. 8:4. Lawlessness is foreign to Christianity, and it will be debarred from Christ's kingdom.

J. N. QUINN.

#### Parson Mossback to Mr. Edison

DEAR MR. EDISON: Were you jesting when you recently told an eminent magazine editor that "all furniture would soon be made of steel;" that "men are lunatics to keep on building with bricks and steel" instead of reenforced concrete; that gold is likely to be manufactured for twenty-five dollars a ton; that all books will be made of steel or nickel; and that "cloth, buttons, thread, tissue-paper, and pasteboard will be fed into one end of a machine, and suits of clothing, packed in boxes, will come out of the other"?

There must have been a twinkle in your keen eye at the gullibility of some scribes when you said some of these things, but you appear to be more serious when you go on to add:—

"Why should we expect poverty to continue? Poverty was for a world that only used its hands. Now that men have begun to use their brains, poverty is decreasing.

"Think how long the world has stood, and then remember that *everything we know to-day that is worth while we have learned within a hundred years*. Look about you, and see how many things that were worth while were known a hundred years ago."

Well, Mr. Edison, let us do it.

Love was known a hundred years ago, and that is worth while; and patience and gentleness and kindness, and they are worth while.

A father's care, a mother's tenderness, a brother's chivalry, were known a hundred years ago, and they are worth while.

A God was known a hundred years ago, and he is worth while.

But you are speaking of intellectual achievements, I suppose, not of the achievements of the heart. "Everything we know to-day that is worth while

we have learned within a hundred years; we have only just begun to use our brains," you say.

So Shakespeare did not use his brains, for he lived more than a hundred years ago. What did he use, I wonder, in writing his tragedies?

And Milton and Plato and Homer and Julius Cæsar and Paul and Isaiah,—they lived several hundred years ago. What a pity men had not begun to use their brains in those days when they wrote and wrought!

Phidias turned out some very tolerable sculpture more than two thousand years ago, but undoubtedly your machines can beat him, now men have "begun to use their brains." Raphael painted some very good pictures, too, and so did Titian, several hundred years before you were born.

Some one built the Taj Mahal four hundred years ago, and Giotto built the Campanile of Florence several centuries ago; but, now that men have begun to use their brains, I suppose your "reenforced concrete," of which you say all buildings will be constructed in thirty years, will give us something far finer than Giotto or Christopher Wren ever conceived.

O Mr. Edison, believe me, if you will take the word of an old, superannuated parson, there has been for more than a hundred years something better worth while than ever came out of your retorts and your laboratories.

The Cathedral of St. Mark's is worth a hundred of your reenforced concrete sky-scrapers.

"Paradise Lost" is as much superior to your phonograph as an angel is superior to a poll-parrot.

The book of Psalms is worth all the telephones that ever drove one crazy with their insistent tinkle.

No, Mr. Edison, Portland cement, even when reenforced, never built up character; and electricity never put new life into a dead soul; and you will never find the beginning of wisdom in any of your crucibles.

I admire you for your fertile inventiveness; I appreciate your patient industry; but there is something as much better than the crass materialism of the present day as spirit is better than dirt and heaven is better than earth. At least, that is the opinion of

Your humble friend,

A. MOSSBACK.

#### Niagara's Peril

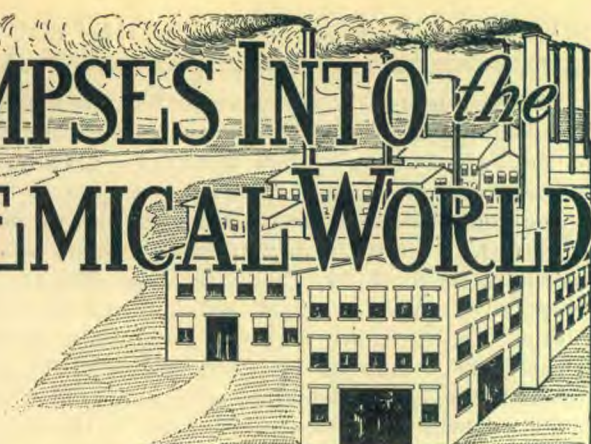
It was thought that the waterways treaty with Canada had saved Niagara Falls, but it seems now that there is serious danger that the drawing away of the water permitted by present laws will seriously damage the beauty of the Falls, if, indeed, it does not cause the drying up of the American Falls altogether. As it is, hundreds of feet of rock on the American side are barely covered with water, the Bridal Veil is much thinner than it used to be, and portions of the rapids have lost much of their former impressiveness. The treaty with Canada provides a limit to the taking of water for power purposes, but there is no limit to the use of water for sanitary and domestic purposes. We hope that our readers will write to their congressmen urging them to use every means to save this wonder of the world.—*Selected*.

THE most manifest wisdom is continued cheerfulness.—*Montaigne*.





# GLIMPSES INTO *the* CHEMICAL WORLD



## The Chemistry of Soap and Candles—No. 18



As a necessary introduction to the study of the chemistry of soap-making, we shall briefly study alkalis and oils; for in these are found the essential constituents of soap.

Bases, soluble in water, which have exceedingly strong basic properties, are called *alkalis*. The four most common alkalis are the hydroxides of sodium, potassium, calcium, and ammonia. The last-mentioned one is familiar to us under the name of ammonia water, and the first two under the name of potash or lye. These substances are all caustic, burning. The first three are called *fixed* alkalis, while the last is a *volatile* alkali, since it readily breaks up into water and ammonia gas. The word alkali meant originally *ash*, and since these alkalis were derived from the ashes of plants by leaching them in pots, they were called *potashes*. Land plants, as trees, yield potassium hydroxide; and sea plants yield sodium hydroxide. A potassium potash is one of the principal alkalis of the animal body. The raw wool of sheep contains much potash.

The "lye" obtained from the ash-hopper is largely water containing, in solution, potassium hydroxide, or potassium potash. This will make what

is known as *soft* soap. Sodium potashes make a hard soap. The soft soap of the potassium potash can be made into quite a solid soap by adding common salt, which is a sodium compound. Our hard soaps of commerce are made directly from the sodium potash.

All fats and oils consist of glycerine and one or more fatty acids. Lard consists essentially of glycerine and *palmitic* acid; tallow, of glycerine and *stearic* acid; olive-oil, of glycerine and *oleic* acid. Yet each of these contains some of each of the acids in varying proportions.

Stearin and palmitin are solid at the ordinary temperature, while olein is liquid; therefore oleic acid must predominate in the oils; while the stearic and palmitic are in excess in the solid fats. "Butter consists mainly of glycerine and myristic, palmitic,

stearic, caproic, caprylic, capric, and butyric acid."

Now understanding the nature of potash and of a fat, we can easily understand the process of soap-making, or saponification; for a soap is a chemical salt formed from the union of a potash and a fat or oil under the influence of heat. If you have watched your grandmother make a kettle of soft soap, you are familiar with this fact. The potash, sodium hydroxide ( $\text{NaOH}$ ), breaks up the oil or grease into glycerine and a fatty acid; the sodium ( $\text{Na}$ ), united with the fatty acid, making a soap, as sodium stearate or sodium oleate, the kind of soap depending upon the kind of grease used. The oxygen and hydrogen of the potash unite with the glyceryl, making a hydroxide of glyceryl, or glycerine, as a secondary product. Until within the last quarter of a century this so-called waste product was run into the nearest stream; but at present it is used in the manufacture

of nitroglycerine for dynamite and blasting gelatin. The use of this by-product has materially lessened the cost of soap.

When the process of saponification is completed, the soap is grained, or salted out, by adding common salt. This causes a separation of the soap from the lye and glycerine. Coconut-oil saponifies readily with lye without boiling; hence it is used for "cold process"



CANDLE MOLDING ON A LARGE SCALE

soaps. By this process any excess of lye and glycerine is left in the soap.

If calcium is used instead of potassium or sodium in making soap, a lime soap results which is insoluble in water. Insoluble soaps are sometimes used in medicine and in the arts. If a soft soap is put into hard water, or water containing lime, the soft soap is destroyed, and an insoluble lime soap formed. This white insoluble soap you have noticed if you have ever tried to wash your hands with soap in hard water. Water of permanent hardness, that is, water that can not be softened by boiling, may be softened by using borax or washing-soda.

Genuine Castile soap, now rarely seen, was made from pure olive-oil and soda-lye. The mottling of this soap was done by adding a solution of copperas



and stirring slightly. Coloring matter and perfumes are added during the latter part of the process of manufacture. Toilet soaps are not always made from as good material as the washing soaps; for the manufacturer often uses poor material, trusting to the perfumes and coloring matter to hide the inferiority of the soap.

Yellow soaps contain rosin, for this material readily unites with the alkali, and being cheaper than fats, is substituted for a portion of the fat. This, however, facilitates the lathering process.

Floating soap is made by remelting white soap and stirring air into the mass, in a machine much like an egg beater. During the operation the soap increases in bulk sufficiently to make it light enough to float.

For two thousand years or more soaps have been made, but not more than a century has the chemistry of the process been understood.

The utility of toilet soap depends upon a chemical action. "On account of its slightly alkaline properties, it has the power of uniting with the oil secreted by the glands of the skin, which holds the particles of foreign matter. This 'dirt,' therefore, may be removed by the mechanical action of the water." Too frequent bathing with the application of strong soap will cause the skin to chap, by removing the oil which keeps it soft and pliable.

#### Candle-Making

Candle-making is a saponification process also; for while no soap results, the fatty acid and glycerine of the fat are set free either by heat or by sulphuric acid, and this process in itself is termed saponification. The candles are made of the solid fatty acids, and the glycerine is a by-product, the same as in soap-making. As we have said before, in all common fats there are usually present some of each of the three acids, stearic, palmitic, and oleic. The oleic, being liquid at ordinary temperature, is not desirable for candle-making; so the fatty acids are cooled and subjected to pressure, which separates the oleic acid; the solid stearic and palmitic acids are then molded into proper forms. Home-made candles are made of the unchanged fats; but they are not so hard and pure as the manufactured product of commerce.

There are three processes of manufacture,—pouring and rolling for wax candles; molding for most other varieties, as spermaceti, paraffin, and stearin candles; and dipping, sometimes employed for tallow candles, hence called "dips."

Wax adheres to the sides of a mold, so wax candles must be made by pouring the wax over the wicks, which are suspended on rods by means of hooks. The wax is poured over each in turn. When this has been done several times, the candles are reversed, and the operation repeated. This is necessary because the wax cools and forms protuberances at the bottom. After the candles are of the proper size and hardness, they are rolled under pressure, and trimmed with knife and gage.

One hundred candles may be molded at a time by present machinery. The molds for the tips are made movable, so that when one set of candles has been molded, they are ejected from the tubes by an upward push of the tips, and are caught in clamps suspended above the trough. When the clamps are in turn raised, the wicks extend down through the tubes to bobbins arranged underneath. When the

next set of candles is molded, the wicks of those suspended in the clamps are cut, and the candles taken out; and so the operations go on continuously. The molds are surrounded with hot water while they are being filled. When full, the hot water is replaced by cold, which hastens the solidifying process. (See cut on preceding page.)

In dipping candles, the wicks are suspended from a frame, and are repeatedly dipped into the melted tallow or stearin until the requisite thickness has been attained, the tallow being allowed to cool after each immersion.

Aniline or vegetable dyes are generally used for coloring candles.

A chandler's apparatus has been found at Herculaneum; so the art of candle-making is not a modern one; but spermaceti and wax candles do not antedate the eighteenth century.

Spermaceti is the wax-like solid left when the oil of the sperm-whale is chilled and subjected to strong pressure; when saponified or broken up, it yields palmitic acid and ethal. Paraffin occurs in petroleum, coal-oil, and when the petroleum is distilled, it comes off in abundance at the latter part of the distillation. It is also obtained from the distillation of soft coal and wood.

#### Oleomargarine

OLEOMARGARINE is made from several of the fats. Its foundation is tried beef fat. After this liquid solidifies, the solid stearin is skimmed off and placed in bags of strong cloth, and then subjected in a warm room to very heavy pressure, which squeezes out the still liquid *oleo* oil. This oil, at the temperature of the room in which it is pressed, is a clear, tasteless, amber-colored fluid containing olein and palmitin as well as some stearin; while a quantity of firm, hard white stearin, or tallow, is left in the bags, to be sold for other purposes than butter-making. At the ordinary temperature of the air, *oleo* oil is a light yellow, brittle solid, which crumbles like cheese when cut. The flavor of butter is imparted to the *oleo*-oil by churning the latter with milk or with milk and butter, at a temperature (about 80° F.), high enough to keep the materials in the melted state. This is colored by means of annatto, a coloring matter obtained from the fleshy pulp which surrounds the seeds of a certain Central American tree. It is used to a small extent in coloring the real butter and cheese, as well as oleomargarine.

"In order to obtain the consistency or grain of butter the mixture is cooled suddenly by running it from the churn into ice-water, or upon pounded ice that is continually stirred; and to improve the consistency of the product, particularly in winter, some soft fat, as cottonseed oil or lard, is often put into the churn with the oleomargarine and milk."

The manufacture of this butter substitute "dates back to the time of the Franco-German war, when the inhabitants of Paris were hard up for butter." It has now become a very important commercial product, many millions of dollars' worth being sold annually. So long as it is properly labeled, and sold only under its real name, we shall not even begrudge it a place on the menu; but let it not grace any table hypocritically.

WE must in some sort live what we write, if what we write is to live.—*Joaquin Miller.*





### Straightway

"WHAT madness this?" cried the fisher folk  
By the Lake of Galilee,  
When sudden and clear in their ears it broke,  
A young man's "Follow me!"  
Straightway and swift as a homing bird  
Flies up to the waiting nest,  
They answered the call whose hearts were stirred  
By a vision of Love's own best.

They left the nets they would need no more  
In the old familiar toil,  
They turned away from the friendly shore,  
As men enriched by spoil.  
For grave and sweet was their Leader's face,  
And his eyes were full of cheer;  
They would march at his bidding with resolute pace,  
And challenge the menace of fear.

You who are young in the world to-day,  
Have you heard that ringing call?  
Are you ready to heed? will you walk the way  
That is bravest and best of all?  
It is sounding down from the heights above;  
It is Christ's word, "Follow me!"  
Ah, straightway answer the mighty Love,  
His servants and soldiers be.

— Margaret E. Sangster.

### Swearing

To swear is "to appeal to God either solemnly or profanely."

To defend such swearing is a hideous immorality worse than the sin itself, which, alas! is very common in many of our college circles. Swearing is the most gratuitous and inexcusable of sins.

Stealing may be excused if a man is hungry, or his children are starving.

Murder, even, may have its palliating circumstances; but the man who swears profanely can have no excuse from either God or man.

He can plead neither passion, nor appetite, nor irresistible temptation; for his words are a direct and unprovoked insult to God Almighty or Christ, his Son.

He gains nothing by it except a seared conscience and the curse of the God whose name he takes in vain, "for the Lord will not hold him guiltless that taketh his name in vain."

It makes me cringe, as though I had been struck a blow in the face, to hear the idle and profane use of the name of our Lord Jesus Christ. "For — sake hold my books while I light my pipe," we heard a student in one of our great technological schools say as we passed him on the street the other day. A man who would, unprovoked, use such an expression I would not trust out of my sight.

He would desert his wife, embezzle money from his employer, beat his mother, betray his best friend, if the temptation seized him; for any such expression shows a heart rotten at the core.

Young women, beware of such men if they ever seek your confidence.

Young men set your faces against this terrible sin;

avoid it as you would the plague; and if you can not reform the profane man, avoid him as you would a leper.

A great poet stated the case against swearing mildly when he wrote, "To swear is neither brave, polite, nor wise."

To put the matter positively rather than negatively: "To swear is cowardly, because it is taking advantage of God's long-suffering kindness; boorish, because it offends the ears of decent people; foolish, because it brings with it no advantage to any one, but only harm; wicked, because it is a sin against God and his commandments."— *Christian Endeavor World*.

### Show Your Colors

I WAS riding on a train through the eastern section of North Carolina, writes Rev. C. H. Mead, when two men came in and took the seat in front of me.

Shortly afterward one of them took a bottle from his pocket, pulled the cork, and handed the bottle to his companion. He took a drink, and the smell of liquor filled the car.

Then the first one took a drink, and back and forth the bottle passed, until at last it was empty, and they were full.

Then one of them began swearing, and such blasphemy I had never before heard in all my life. Women shrank back, while the heads of men were uplifted to see where the stream of profanity came from.

It went on for some time, until I began talking to myself — I always did like to talk to a sensible man.

"Henry, that man belongs to the devil."

"There is no doubt about that," I replied.

"He is not ashamed of it."

"Not a bit ashamed."

"To whom do you belong?"

"I belong to the Lord Jesus Christ."

"Are you glad or sorry?"

"I am glad, very glad."

"Who in the car knows that man belongs to the devil?"

"Everybody knows it, for he has not kept it a secret."

"Who in the car knows you belong to the Lord Jesus?"

"Why, no one knows it, for you see I am a stranger around here."

"Are you willing they should know to whom you belong?"

"Yes, I am willing."

"Very well; will you let them know it?"

I thought a moment, and then said, "By the help of my Master, I will."

Then, straightening up and taking a good breath, I began singing, in a voice that could be heard by every one in the car, "There is a fountain filled with blood."

Before I had finished the first stanza and chorus, the passengers had crowded down around me, and the blasphemer had turned around and looked at me with a face resembling a thunder-cloud. When I had finished the chorus, he said, "What are you doing?"

"I am singing," I replied.

"Well," said he, "any fool can understand that."

"I am glad you understand it."

"What are you singing?"

"I am singing the religion of the Lord Jesus."



"Well, you quit."

"I guess not," I replied; "I don't belong to the Quit family. For the last half-hour you have been flying your master's colors pretty high; now for the next half-hour I am going to fly my Master's colors."

"My master! Who is my master?"

"The devil is your master, while Christ is mine. I am as proud of my Master as you are of yours. Now I am going to have my turn; if the passengers don't object, I want to sing the rest of the song."

A chorus of voices cried out, "Sing on, stranger; we like that."

I sang on, and as the next stanza was finished, the blasphemer turned his face away, and I saw nothing of him after that but the back of his head, and he left the train soon after. Song after song followed, and I had other voices to help me. When the song service ended, an old man came up to me, put out his hand, and said, "Sir, we owe you thanks."  
— *Christian Endeavor World*.

### Seven Thoughts for the King's Workers "Early in the Morning"

MATT. 25:25

The man who wrapped his talent in the napkin was too sanguine. There never was an unused talent rolled in a napkin, but that, when taken out and put into the scales, was lighter than when first hidden away. "Weighed and found wanting"! Remember to-day, "Talents not used or misused become a menace."

LUKE 11:2

"Thy will be done" is not merely a prayer of resignation—not passivity, but *action*. Something is to be *done*. When we pray that, we mean that we are ready to do it. Are we now? O that the Master could say of us, as he said of the woman, "She hath *done* what she could"! "*What she could*" means *all* she could. The man who is ready to risk *all* for God can count upon God to do *all* for him.

JOHN 10:10

"Life more abundantly"—literally, "above the common;" to live uncommon lives; to be uncommon Christians! Then an uncommon influence will be going out, one that will count for righteousness. "More abundantly"—energized with his mighty power. May the Lord give us this in our service for others.

1 TIM. 1:12

"He counted me faithful." How touching are those four words, and what a wealth of love and trust lies behind them! Think of it! The Master is counting on *us*. We can not afford to disappoint him. No; we will not. "Though but an armor-bearer I may be, surely the Captain can *depend* on me." Sing it a bit through the day. It helps.

COL. 3:17

"The least action may as surely be done from the loftiest motive as the greatest action."

"Though scoffers ask, 'Where is your gain?'  
And mocking say, 'Your work is vain,'  
These scoffers die and are forgot;  
*Work done for God, it dieth not.*"

1 TIM. 1:12, R. V.

"Appointing me to his service." Wonderful! The King has made an appointment with me—with *you*. Appointed to go and work in his vineyard! Appointed to "go and bear fruit," *abiding*

fruit! Remember to-day, "By special appointment of the King."

JUDGES 6:14-16

"Go in this thy might. . . . Surely *I will be with thee.*" "*With thee*"—what companionship for mortals! "Working, O Christ, *with Thee.*" "This changes toil to bliss." Why do we linger? O Master, help me to conquer *the sin of hesitation*, and learn to say with Paul, "I can do all things through Christ which strengtheneth me."

ERNEST LLOYD.

### The Things I Miss

[Colonel Higginson's favorite of his poems.]

AN easy thing, O Power divine,  
To thank thee for these gifts of thine,  
For summer's sunshine, winter's snow,  
The hearts that burn, the thoughts that glow;  
But when shall I attain to this,  
To thank thee for the things I miss?

For all young fancy's early gleams,  
The dreamed-of joys, that still are dreams,  
Hopes unfulfilled and pleasures known  
Through others' fortunes, not my own,  
And blessings seen that are not given,  
And never will be, this side heaven.

Had I, too, shared the joys I see,  
Would there have been a heaven for me?  
Should I have felt thy being near,  
Had I possessed what I hold dear?  
My deepest knowledge, highest bliss,  
Have come perchance from things I miss.

To-day has brought an hour of calm;  
Grief turns to blessing, pain to balm;  
I feel a power above my will  
That draws me, draws me onward still.  
And now my heart attains to this,  
To thank thee for the things I miss.

— *Thomas Wentworth Higginson*.

### At the Prayer and Missionary Meeting

THE prayer and missionary meeting is a good place to be. At one the other evening I heard a young woman tell how, on taking some packages of tracts to her neighbors, she found all a little surprised that "free reading" was offered them, but in every case the tracts were thankfully received.

A young man mentioned his visit to a certain lawyer in the city who had written upon some topic in one of the local papers in such a way as to lead our brother to believe that this gentleman would be susceptible of further light. When the young man entered the office, he found the lawyer reading a small tract, which proved to be one published by the Review and Herald years ago, while in Battle Creek. The lawyer had just come across the tract in an old box of papers that he had been sorting over. About the first question put to our young brother was, "Are you a Seventh-day Adventist?" Perhaps he saw it written on his face. Anyhow, on learning that he was, a very profitable interview followed. Who suggested that this young man go to the lawyer's office at this certain time? How did it come that the lawyer had been sorting over some old papers and had run across this tract at this very moment? Certainly quite a remarkable coincidence.

Another young man told in the prayer-meeting of a victory he had gained the past week. For some time he had felt that he ought to write to certain friends, but had put it off or had given little heed to the matter; but during the previous week he had written to three of his friends in a distant State,



telling them of his recent good experiences in serving the Lord. It was a struggle for him to write those letters, but the doing of it brought much joy into his own heart, and with the joy had come the blessing and peace of the Lord. It was also another victory, we could observe, for him to get up in prayer-meeting before his young associates and relate this experience.

Another brother told of his consecrated pocket. He was going to the city to meet a business man, whom he would be glad to help in some way if he could, and thinking he would take him a tract, he picked up one at random, and had it ready for the occasion, in that special tract pocket. During the interview a place was found where he could hand the little messenger to his friend, who, after slowly reading its title, said, "Just the thing I have been wanting to read! Thank you."

These are among many other very interesting experiences heard at just one prayer and missionary meeting.

T. E. BOWEN.

### Growing Up Into Christ

#### Why There Are Battles

You are trying to grow to the full stature in Christ Jesus. Do not let your daily struggles discourage you. Have you ever heard the story of the old judge and his Christian slave whom he took with him from one court to another over the circuit? One day the judge said: "Sambo, how is it that you are always talking about your fight with the devil—about the conflicts you have with the powers of darkness? I don't have any of these troubles—any of these fightings you have. How do you account for it?" And he flustered the poor old negro. Of course he could not read. But one day the judge, who was a sportsman, got out his gun and killed one duck and wounded another. Then he said, "Rush and get that wounded duck. Get that live duck." Sambo got the wounded duck, and he also got his illustration. He came back into the wagon, and said, "Jedge, I understan' dat question we were discussin' befo'. De devil's after me; I'm wounded; but he's got you." When a man is dead in trespasses and sins, Satan lets him alone.

#### In the Heavens

One of my friends told me he stood one morning on one of the highest peaks of the Rocky Mountains, bathed in the perfect sunlight of a perfect day. He looked down at his feet, and a storm was raging in the valley. He felt almost as if he could step out and walk from peak to peak, so heavy were the clouds; and he could almost hear the roar of thunder and see the flash of lightning, for there was a tremendous storm raging in the valley.

As he was looking down, suddenly up from the dark clouds came a black body. He looked again, and still a third time, and the great black object was a Rocky Mountain eagle, measuring seven feet from tip to tip of its wings. "As I looked," he said, "the eagle mounted higher and higher above the clouds, and, fighting its way through the storm, soared high above my head, every feather wet with the rain-drops, and every rain-drop sparkling like a jewel in the sunlight; and I stood watching it until it was lost in the very face of the sun."

This is a picture of the Christian rising above the things of the world. I will give you a verse of Scrip-

ture to prove it: "They that wait upon the Lord shall renew their strength; they shall mount up with wings as eagles; they shall run, and not be weary; and they shall walk, and not faint." You may have a temperament ever so miserable, and you may have a body ever so weak, but you may dwell in the secret place, and never get out of communion and fellowship.—*J. Wilbur Chapman, D. D.*

#### Growing Up for God

Once a rich man was looking for an estate along the majestic Hudson River, on which to build his house. Horace Greeley asked him what he was going to build. His reply was: "It depends upon three things: first, what design I get from the architects; second, what material I can secure with which to build it; and third, what location I can find for it."

It is just that way with a man in the building of his life. God, the great Architect, has a beautiful plan for him, and his first business is to discover what the design is. Then he has to learn to use the materials God places within his reach, and to build in the situation in which God puts him. The lives that fail to grow in strong and lovely buildings are those that fail in some of these particulars.

In a sermon on growth Dr. Charles M. Sheldon had this strong sentence: "The sooner we wretched braggarts drop out of our vocabulary the word 'mine' and substitute the word 'Thine,' the sooner we may expect to grow in the grace and knowledge of Jesus Christ." "Our wills are ours, to make them Thine." I think Tennyson never wrote a wiser line than that. The secret of growth is obedience.

If we wish to "grow up for God," then the first thing is to study the Bible, to learn God's design for us. It is drawn there in clearest and fairest lines. The next thing is to commune much with God, that his power may enter our lives, as the inspiring warmth of the sun enters the seed, which without it would lie in the ground forever, only a seed. The third thing—and the last—is to reach out, as the seed does. Reach out to the nearest material, and use it as God guides. Reach out to the nearest task, and do it as God empowers. No one ever grew except by this humble, daily, trustful duty-doing; and no one ever lived that way long without growing to be a giant.—*Amos R. Wells.*

### The Keeping Counts

"OH, this making good resolutions," exclaimed United States Senator Beveridge, of Indiana, to a party of Washington acquaintances, "and not keeping them is what hurts! A resolve is good as far as it goes, but it doesn't make a hundred cents on the dollar until it is kept."

"Out in my home country there was an old farmer who employed a young man full of resolutions. Every night he would resolve he would rise promptly for work the next morning, every day he determined he would finish the work at hand before quitting, every week he tried to get a new grip on himself to save his extra pennies and start a small bank account, but there all his efforts ceased. He never got beyond his resolutions, and his work grew steadily more unsatisfactory to his employer."

"Finally, one day, much to the young man's surprise, the farmer said to him: 'Jed, I'm goin' to raise your wages. Yes, sir, I'm goin' to raise them.'"

"Jed rolled his eyes and twisted his thumbs. He



knew he did not deserve a raise, and he thought his employer had temporarily lost his senses.

"'I'm goin' to raise your wages, Jed,' the old man went on, 'just as soon as you keep one of your resolutions. You show me you can keep a resolution, and I'll pay for it. Keeping is what makes a resolution worth money, Jed.'"

"Fortunately for Jed, he saw the truth at the right time and began to make fewer 'resolutions,' but what he did make he kept. Then his work counted."

— *Selected.*

### Do You Say?

Do you say, "Is the gas *lit*?" instead of, "Is the gas *lighted*?" *Lighted* is preferable to *lit* in both the past and the perfect tense.

*Should* is required in the sentence, "The second paragraph of this circular was never before called to our attention, or we *should* [not *would*] not have demanded payment of the claim as presented."

RULE.—*Should* in the first person and *would* in the second and the third are used to express contingent futurity or condition beyond the control of the will."

Do not say, "I would have liked to send you some flowers." Use *should* with *like* in the first person; *would* in the second and third; as, "I *should* have liked," "You *would* have liked," "He *would* have liked."

One *sets* a hen; and after the hen has been *set*, the hen *sits*. In other words, when the meaning to be expressed is to cause to sit, *set* is correct; when an action is expressed, *sit* is required.—"Correct English."

### Shoes of Humming-Birds' Feathers

ACCORDING to a Bond Street purveyor of footwear, women's shoes made of the breast feathers of humming-birds are the latest form of extravagance. They are valued at two thousand five hundred dollars a pair, the highest price demanded for shoes without diamonds or jeweled settings.

It seems that these dainty little things are the creation of a Paris shoemaker, and that it takes six months to make a pair. Many humming-birds are required to make one pair of shoes, as the tiny breasts must be stitched together to make a cloth of feathers. The effect is quite striking, the shoes gleaming with tones of red and gold mingled.

In this connection it is interesting to know that more money than ever is being paid for boots and shoes. One Bond Street merchant said that bedroom slippers of silk brocade, trimmed with marabou feathers, are quite the fad among the fastidious, and sell for about thirty-five dollars a pair.

"I make a special form for each of my customers, to insure a perfect fit," he said; "and I do not accept a commission for fewer than ten pairs of shoes. With these are supplied six pairs of stockings to match each pair of shoes, making sixty pairs of silk stockings altogether; ten trees to fit the shoes, and a special box into which the shoe can be fitted and taken on journeys without trouble. I will not make only one pair of boots or shoes for new customers, as I often have to make several pairs experimentally before a perfect fit is obtained, and these, of course, are at my own expense."

This merchant says an American woman has just ordered two thousand dollars' worth of silk stockings,

for which sum she will receive two hundred pairs. Costly stockings are much in vogue now that trim ankles peep from under the fashionable short walking skirts.— *Washington Post.*

### To Know God's Will

F. B. MEYER was once asked how one might surely recognize the will of God. He replied: "This question was answered for me once as on a very dark night we were entering Holyhead harbor. I asked the captain how he goes about finding the narrow entrance to the harbor at night. He said to me, 'See yonder three lights? When these are in line, I am in the right channel.' So it is with the will of God. When the Word of God, the impulse of the Holy Spirit in my heart, and the outward circumstances are in harmony, then I am convinced that I am acting in accordance with the will of God."

### Something for You to Do

FILL in this coupon and mail direct to your congressman at Washington.

Get your county paper, your city paper, your church paper, to aid this fight, by printing this coupon.

Act quick; Congress is in session! Every Prohibitionist, every lover of justice, and every man, woman, and child who believes that the people of our States have a right to expect respect for their reform laws from the federal government, should fill in this coupon, and let their representative know that the good people of his territory want to know, "Where do you stand?"

Fifty million American citizens living in States, cities, and towns which have outlawed the saloon demand justice and a square deal from the present session of Congress. Pass the Webb Interstate bill and end an intolerable situation. Every brewer and distiller is against it, but every home is for it. Where do you stand?

NAME.....  
ADDRESS.....

### The Webb Interstate Bill

BE it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, that the shipment or transportation, in any manner or by any means whatever, of any spirituous, vinous, malted, fermented, or other intoxicating liquor of any kind, including beer, ale, or wine, from one State, Territory, or district of the United States, or place non-contiguous to but subject to the jurisdiction thereof, into any other State, Territory, or district of the United States, or place non-contiguous to but subject to the jurisdiction thereof, or from any foreign country into any State, Territory, or district of the United States, or place non-contiguous to but subject to the jurisdiction thereof, which said spirituous, vinous, malted, fermented, or other intoxicating liquor is intended, by any person interested therein, directly or indirectly, or in any manner connected with the transaction, to be possessed or kept, or in any manner used, either in the original package or otherwise, in violation of any law of such State, Territory, or district of the United States, or place non-contiguous to but subject to the jurisdiction thereof, enacted in the exercise of the police powers of such State, Territory, or district of the United States, or place non-contiguous to but subject to the jurisdiction thereof, is hereby prohibited; and any and all contracts pertaining to such transactions are hereby declared to be null and void, and no suit or action shall be maintained in any court of the United States upon any such contract or contracts, or for the enforcement or protection of any alleged right based upon or growing out of such contract or contracts, or for the protection in any manner whatsoever of such prohibited transactions.





## Jim's Laundry List

EACH morning when I first get up,  
My mother takes me in  
The bath-room and erzamines me  
To see if I am clean;  
I think it's awful funny,  
When she knows I am all right,  
For don't she scrub me her own self,  
'Bout every single night?

She's dreadfully a-scared of dirt,  
I know from all she's said.  
But how can I be dirty when  
I've only been to bed?  
That always bothers me, because  
The sheets are white as snow,—  
But she takes such an interest  
In finding dirt, you know!

I mean,—O dear, what do I mean!  
It's 'cause she "loves to see  
Her little boy as spotless as  
A gentleman should be."  
I wish she didn't love me so! —  
No! That's not what I mean!  
But I wish she wouldn't worry so  
About my being clean!

If she'd just make a laundry list  
That I could read each time,  
Instead of bothering herself  
To wash me, 'twould be fine!  
Just write it out and tack it up  
Above the bath-room sink,  
And 'numerate what she'd like washed,  
'Twould help a lot, I think.

*Little Folks'  
Monthly  
Magazine*



One pair of hands, one pair of  
ears,  
Two dozen teeth or more,  
One neck, one face, two eyes,  
one nose —  
That makes 'most thirty-  
four!  
O my! 'Twill be an awful task  
To wash all these each day!

I'm hoping that when mother counts  
Them all, she'll kindly say,  
"Tis quite unnecessary, dear,  
To do all this," and she  
Will let me wash just once a week,  
Like Katie does, you see!

— Grace M. Frame, in *Little Folks' Monthly Magazine*.

## How Wadi Made His Numbers

ONE day in a primary school the children were making figures on the board. There was a little boy there who came from Egypt: He was only five years old, so all the others watched him to see what he would do. They wanted to see the funny numbers he would make. But Wadi went to the board and made our figures without any trouble — ten of them.

She was much surprised and pleased; and all the children wondered, for they could not make theirs half so well. It was true that he laid the figure one down flat on its back, and he made the hook of the figure five before he made the shaft; but they were a very nice set of figures for all that.

Nobody in this country had ever taught him to write them, and this was the first time he had been to an American school; so the teacher was puzzled. She asked Wadi what language his teacher taught him to write in Egypt. Then he spoke up real loud, and said, "In Arabic, teacher." That explained it all; for ours are Arabian figures, too.

Then the teacher told them the story of how we came to get them. She said, "Years and years ago all the people who used to speak English and Latin and Greek made the figures we call Roman numerals. We do so still when we number our chapters or our paragraphs and some other things. And the Romans said they took them from the Greeks, their clever next-door neighbors.

"When men went to those Eastern countries, long, long ago, on pilgrimages and to war, they found many of the people who lived all round Arabia counting with the same easy figures you are using to-day. When they asked the sheiks, or Arab chiefs, how they had first made up such nice numbers, these had to say, like the Romans with their letters, 'Next-door neighbor.' For they had borrowed them from the people who lived in India. The Chinese people, who lived next door on the other side of India, had taken a few, too; but they did not take them all, only enough to multiply with, so that every big number as they wrote it was a little example in multiplication. If they wanted to say thirty, they would write the queer Chinese sign for ten, and then put a tiny number three high up on the left side for the multiplier.

"So the men from Europe learned the number signs, and practised writing them, too. Then they told the people of other countries about them on their long way home. But the people who painted and wrote the first books — for there was no printing then — said: —

"We like our own letter numbers the best. We are used to them. They are like nice old friends. We like our numbers all made up of lots of letters. You can use your queer number signs if you like for buying and selling. But we shall keep on using letter numbers for our books.' And if you will look at the beginning of the chapters of any book, you will see that somebody thinks so still.

"We have used the new numbers only three hundred years. It was only about the time that the Pilgrims came to America that the people of England began to use these Arabic figures. Of course we followed their customs, for this country belonged to the English king until after the Revolutionary war.

"So this is the way we came to borrow Wadi's number signs. The first borrowing happened so very long ago that almost everybody has forgotten about it. And we didn't mean to steal either, you know. They did not care to keep their numbers all to themselves. This is why Wadi could surprise us all by just writing his own number work." — Edith Perry Bodwell, in *Youth's Companion*.

Now is the nick of time. In matters which reach into eternity, now is always the nick of time. One man now is worth a hundred fifty years hence. One dollar now is worth a thousand then. Let us be up and doing before it is too late. — Lyman Beecher.



### Literature as Ammunition

WHILE we are seeking to enlarge the membership of the King's Pocket League for the purpose of increasing the distribution of the literature dealing with the special truths of the third angel's message, we can also use the league's method very successfully in our temperance work. The following experience of Mr. Clarence True Wilson, D. D., may give us new inspiration to be very generous in our service of literature distribution, even if it does not give us any really new plans of work:—

I have used this plan in a temperance campaign, and it electrified the community in a few days. I wrote a leaflet, "Won't You Vote Out the Saloons for My Sake?" and gave each boy and girl of all the Sunday-schools one, and offered a prize to the one in each school who would secure the most readers that week. The effect was magical; in twenty-four hours the town was ours. Three thousand persons read it, and few could resist the appeal.

In the recent Oregon campaign I used leaflets to great advantage by getting off trains at every stop and handing our literature to every man and boy at the station. The eagerness of all to secure one indicated the certainty of its being read. As soon as the first one is handed out, all hands are extended, and everybody moves that way.

#### A Chicago Instance

Just yesterday on one of the busiest streets of Chicago I was walking from my office with a package of printed leaflets headed, "William Jennings Bryan Denounces the Liquor Traffic." This was in large letters. A gentleman saw the title, stopped, and politely said: "I see you have something by an old favorite of mine. Would you mind letting me have one?"—"Certainly, you shall have one," I replied. Many other men were passing, and seeing I had something good to give away, they stepped up; and without moving, I gave forty to fifty away in three minutes, and it did my soul good to see so many men walking down the street reading the words of "The Great Commoner" on the rum traffic in politics.

In Western campaigns I have taken long stage rides and entertained myself and my fellow passengers by assorting my leaflets and putting a package into every mail-bag or mail-box we passed on the road. I have put out three hundred packages of campaign literature in a single week's trip.

I have carried tracts in my pockets to hand to strangers and busy people with whom I could not get time to converse. Having a good assortment, when a conversation in shop or parlor or street or car suggests one, no one will be offended if you say, "That reminds me of a leaflet I have by a noted man on that very point." It will be received with interest. For twenty years I have never been without leaflets and tracts; few days have passed without an opportunity to give out one, and no one was ever offended.

"But don't you think tract peddling is small business?" My friend, you are not a bit too large for this job; the only question is, Are you big enough for it? What this world needs is a class not above doing little things well,—men who will fight in the ranks whether there are any vacancies among the generals or not.

Bishop Mallalieu, of Boston, is a big man, but he never sends out a letter, friendly, business, or official, without enclosing some heart-stirring leaflets. I have received many letters from him, but never one without something additional that was good to read.

I have seen worldly men convicted and converted; backsliders reclaimed and made aggressive workers; stingy church-members become conscientious tithers; absentee Christians become regular at prayer-meetings, and indifferent voters become leaders in the temperance reform,—all through receiving at the proper time an appropriate tract.

#### How to Clinch the Point

If pastors who preach on temperance, or other speakers who lecture on prohibition, would clinch their message by distributing at the door leaflets that more fully inform the people on the subject of the evening, the awakened interest would insure a careful reading, and the reading would deepen the conviction already made.

I have conducted a reading circle for months at a time, using, instead of books, leaflets distributed one week ahead, so that all had them, and having a week to study the same chapter, could participate in the discussion.



M. E. KERN  
MATILDA ERICKSON

Chairman  
Secretary

### Society Study for Sabbath, July 8

#### The Way to Christ, No. 7—Growing up Into Christ

LEADER'S NOTE.—In arranging this program be sure to plan for a short consecration service at the close. The article "Growing Up Into Christ," on page 10, contains some helpful thoughts. The member having the paper on "Joseph" may be glad to read "Patriarchs and Prophets," chapters 19-21.

#### Program

Scripture drill (review Morning Watch texts for week).

Bible reading. See below.

Growing Up Into Christ (reading). Selections from "Steps to Christ," chapter 8.

Timothy (five-minute paper).

Joseph (five-minute paper).

Report of work.

#### Bible Readings

1. What does Christ call the change when we repent and confess our sins? John 3:3.
2. Does this spiritual birth leave us full-grown men in Christ? 1 Peter 2:1, 2.
3. How does Paul address some of his new converts? 1 Cor. 3:1, 2.
4. What does God desire of us? 2 Peter 3:18.
5. What is necessary for our growth? John 15:4, 5.
6. What illustration does Jesus give to show that we can do nothing of ourselves? Matt. 6:28, 29.
7. What are we to seek first? Matt. 6:33.
8. As we grow up into Christ, what change will be wrought in our lives? 2 Cor. 3:18.
9. Does this mean that we are not to put forth earnest efforts to increase our knowledge of Christ and his will? 2 Tim. 3:15.
10. What help is promised us? John 16:7, 13-15.
11. Can you look back over the past year and see real growth in your spiritual life? If not, will you begin anew to-day by repentance, confession, and consecration?

### Missionary Volunteer Reading Courses

#### Senior No. 4—Lesson 37: "Christ's Object Lessons"

#### Review

NOTE.—The book may be used in answering these questions.

1. Give five reasons why Christ spoke in parables.
2. Compare the parables of the lost coin, the lost sheep, and the prodigal son.
- 3, 4. Write a short paragraph on each of the following:—
  - (a) Seed-sowing.
  - (b) God's seeking love.
  - (c) Service.
  - (d) Prayer.
  - (e) Importance of personal work.
5. Explain the parable of the rich man and Lazarus.



6. Give five sentences from "Christ's Object Lessons" which you consider worth memorizing.
7. Mention ten practical lessons to be learned from the parable of the talents.
8. What parables show how great is God's measure of forgiveness? Give reasons for your answer.
9. Show clearly the importance of receiving the gift of the Holy Spirit.
10. What book in this year's course has been most helpful to you? Do you plan to take the Reading Course next year?

#### Morning Watch Illustration — Perseverance

"THE vast majority of Christians in this day are useless," stoutly declared Dr. Talmage. "The most of the Lord's battalion belong to the reserve corps. The most of the crew are asleep in the hammocks. The most of the metal is under the hills."

If this is so,—and there is much truth in it,—it is a terribly sad condition of affairs, since Christians are the salt of the earth; and if they lose their savor, wherewith shall the world be salted? By virtue of his calling, his powers, his blessings, and his opportunities, there is no one on earth that should be so fiercely active as the Christian; and Christians are active enough, but is it always about their Father's business?

One of the tombs best worth seeing in St. Paul's Cathedral bears these noble words: "Major-General Gordon, who at all times, everywhere, gave his strength to the weak, his substance to the poor, his sympathy to the suffering, his heart to God; died at Khartum, 26th January, 1885." Over the grave of Alexander Mackay, that ingenious, undaunted, mechanic-missionary to Uganda, are set the words, "A Doer of the Word." Now these are splendid epitaphs. How can we earn their like?—Not by proxy work. Not by delegating all our good deeds to a committee, a pastor, a board, or a society. We must support these; they vastly enlarge the church's power for good. But they can never take the place of individual service.

We are all so slow to see that the only life worth living is a life of helpfulness, and that the best kind of helpfulness springs from personal contact. Lady Holland was constantly complaining because she had nothing to occupy her time. One day she uttered her characteristic lament in the presence of the poet Rogers, who gave her some sarcastic but valuable advice: "Try something new, Lady Holland; try doing a little good." There is no ennui in a life of Christian service. Every day is full of fresh interest. Every night is full of peace.

Let us all adopt for our own this prayer by the ill-fated Maltbie D. Babcock, who so beautifully exemplified its spirit in his life:—

"O Lord, I pray  
That for this day  
I may not swerve  
By foot or hand  
From thy command;—  
Not to be served, but to serve."

—Amos R. Wells.

#### The Secret of Happiness

THERE are briars besetting every path,  
Which call for patient care;  
There is a cross in every lot,  
And an earnest need for prayer;  
But a lowly heart that leans on God  
Is happy anywhere.

—Anna L. Waring.



#### I — Labors at Iconium and Lystra

(July 1)

LESSON SCRIPTURE: Acts 14: 1-23.

MEMORY VERSE: "We must through much tribulation enter into the kingdom of God." Acts 14: 22.

#### Questions

1. When Paul and Barnabas were driven from Antioch by the Jews, to what place did they journey? How did they reach Iconium? What was the distance between the two cities? What class of persons resorted thither? What nationalities composed the population? With whom did the apostles begin their work? Note 1.

2. When the apostles arrived at Iconium, where did they go? What was the result of their preaching? Acts 14: 1.

3. How did the unbelieving Jews seek to make trouble for the apostles? How did the apostles continue to speak? What testimony of approval was given by the Lord? Verses 2, 3.

4. What did the preaching of the apostles cause among the people? Who planned an assault upon the apostles? What was the mob intending to do? How were their plans defeated? Where did the apostles go? Verses 4-6.

5. What does "Lycaonia" mean? How is the region described? To what might the ministry of the apostles at that place be compared? What was the nature of the customs and beliefs of the people of Lystra? Among the few Jews living there, who deserves mention? Where did the apostles probably teach? Note 2.

6. What did the apostles preach to the people at Lystra? Verse 7. In what language did Paul speak? In preaching the gospel of Christ, what must Paul have told them concerning the Son of God? Note 3.

7. What man was among the listeners at Lystra? How long had he been a cripple? What feeling grew in his heart when he heard of the power of Jesus? Who noticed this afflicted man and saw that he had faith to be healed? What did Paul say to him? What did the man do? Verses 8-10.

8. When the people saw this miracle, what did they say? What names did they give to the apostles? Why was Paul called Mercurius? What did the priest of Jupiter bring? What did he want to do? Verses 11-13.

9. What belief was common among the ancients? What tradition did the people of Lystra cherish? What temple stood in front of the city gates? Note 4.

10. When the apostles heard of the desire of the people to offer sacrifices to them, what did they do? What did they say to the people? From what did they urge the people to turn? Whom did they tell them to worship? What did they say of God as Creator? Verses 14, 15.

11. Even when the nations had forgotten God, what witness did he still give of his power and loving-kindness? From what did the apostles find it hard to restrain the people? Verses 16-18.

12. When news of these things spread abroad,



who came to Lystra? What wicked thing did they persuade the people to do? To what influence did they probably attribute the miracle? What was done with Paul? What occurred as the disciples stood about his body? Where did Paul and Barnabas go the next day? Verses 19, 20; note 5.

13. After preaching the gospel at Derbe, where did they return? What did they do in all these places? How only may we expect to enter into the kingdom of God? Verses 21, 22.

14. How did the apostles show their supreme courage and faith? What must the converts in these places have needed? Note 6.

15. How did the apostles seek to establish the churches? Into whose care did they commit these disciples? Verse 23.

#### Notes

1. When Paul and Barnabas were driven from Antioch by the Jews, they journeyed on foot across the bare uplands to Iconium, a city seventy-five miles southeast of Antioch. This place was a great resort for pleasure-seekers and persons of leisure. The population was composed of Romans, Greeks, and Jews. Here, as at Antioch, the apostles began to teach their own people, the Jews, by preaching in their synagogues.

2. Lycaonia, meaning "wolf-land," is described as a region "consisting of two cities and a stretch of cityless territory." Truly these missionaries went there "as sheep in the midst of wolves." Matt. 10:16. Lystra seems to have been a thoroughly Gentile town. Its customs, traditions, superstitions, and beliefs were heathen. No Jewish synagogue is mentioned, though there were a few Jews there. Among them was one young man of worth, Timothy, who became a believer. Acts 16:1, 2. The apostles probably taught in the market-place, or in some porch or school.

3. Paul spoke to the people in the Greek language. In preaching the gospel of Christ, Paul must have told them of the Son of God coming to this earth as a babe in the manger at Bethlehem; of his life and mission on earth; of his rejection by his own people; of his death by wicked men; of his resurrection and ascension; of his power to save sinners.

4. It was a common belief among the Greeks and other nations that the gods occasionally visited the earth in the form of men. A cherished tradition was that Jupiter and Mercury had once visited this very Lycaonia. The temple of Jupiter, the supreme god of the heathen Greeks and Romans, stood in magnificent prominence before the city gates.

5. The Jews from Antioch and Iconium probably persuaded the people of Lystra to regard the miracle as due to the influence of evil demons instead of to the power of the gods in whom they believed.

6. Paul showed courage, faith, and persistence in going back to the very cities where they had been so terribly persecuted. Doubtless the converts in these places needed encouragement and further instruction.

faithfulness in presenting the message in the face of bitter opposition? Verse 3. Compare Heb. 2:2-4.

4. What effect did the preaching of the gospel have on the people? How did the unbelieving element show their hatred of the gospel? Verses 4, 5. Compare 2 Cor. 4:4.

5. Because of persecution where did Paul and Barnabas go? What did they continue to do? Verses 6, 7. Compare Matt. 10:23. Note 1.

6. What marvelous case of healing occurred at Iconium? Relate the story. Verses 8-10.

7. How did the people of Lystra manifest their darkness and superstition? Verses 11-13.

8. What did the apostles do when they heard of this? Verses 14, 15.

9. What great fundamental truth of the gospel message did they bring to the attention of these heathen people? Verse 15. Compare Rev. 14:6, 7; Acts 17:23, 24.

10. What did they say concerning the Lord's patient dealing with nations in times past? What did he nevertheless not neglect? Verses 16, 17; note 2.

11. How did this presentation of the true God affect the people of Lystra? Verse 18.

12. How did the hatred of the Jews manifest itself again at this place? What reversal of public opinion took place? How severely was Paul treated? Verse 19.

13. In what remarkable manner was the power of God shown in connection with this occurrence? Where did the apostles next go? Verse 20.

14. What did the apostles do at Derbe? To what places did they return? Verse 21; note 3.

15. What did they do on their return journey? Verse 22.

16. How did they bind off their labors in every church? Verse 23; note 4.

#### Notes

1. "Lystra is about six hours south southwest of Iconium. The exact site of Lystra is on a hill in the center of the valley. The hill rises about one hundred to one hundred fifty feet above the plain, and the sides are steep. Few traces of ancient buildings remain above the surface. Situated on this bold hill, Lystra could easily be made a very strong fortress, and must have been well suited for its purpose of keeping in check the tribes of the mountain districts that lie west and south of it."

2. "The temple of the Lystrian Jupiter still stood before the gate, and the priest still offered the people's sacrifices to the imaginary protector of the city. Heathenism was invaded, but not yet destroyed. Some votaries had been withdrawn from that polytheistic religion which wrote and sculptured in stone its dim ideas of 'present deities,' crowding its thoroughfares with statues and altars, ascribing to the king of the gods the attributes of beneficent protection and the government of atmospheric changes, and vaguely recognizing Mercury as the dispenser of fruitful seasons and the patron of public happiness."—*"Life and Epistles of the Apostle Paul"* (Conybeare and Howson), page 226.

3. "Paul came to Lystra again after the interval of one or two years, and on that occasion we are told that he found a certain Christian there 'whose name was Timotheus, whose mother was a Jewess, while his father was a Greek,' and whose excellent character was highly esteemed by his fellow Christians of Lystra and Iconium. It is distinctly stated that at the time of this second visit Timothy was already a Christian; and since we know from Paul's own expression, 'my own son in the faith,' that he was converted by Paul himself, we must suppose this change to have taken place at the time of the first visit."—*Id.*, pages 171, 172.

4. "But both Paul and Barnabas returned again to visit Antioch, Iconium, and Lystra, the fields of labor where they had met such opposition and persecution. In all those places were many that believed the truth; and the apostles felt it their duty to strengthen and encourage their brethren who were exposed to reproach and bitter opposition. They were determined to securely bind off the work which they had done, that it might not ravel out. Churches were duly organized in the places before mentioned, elders appointed in each church, and the proper order and system established there."—*"Sketches From the Life of Paul"* (Mrs. E. G. White), pages 62, 63.

## THE YOUTH'S LESSON

### I—Labors at Iconium and Lystra

(July 1)

LESSON SCRIPTURE: Acts 14:1-23.

LESSON HELP: *Sabbath School Worker*.

PLACES: Iconium, Lystra, Derbe.

PERSONS: Paul and Barnabas; believing and unbelieving Jews and Gentiles; the lame man; the priest of Jupiter.

MEMORY VERSE: Acts 14:22.

#### Questions

1. What did Paul and Barnabas do on their arrival at Iconium? What was the result of their labors? Acts 14:1.

2. What course did the unbelieving Jews take toward these gospel workers? Verse 2.

3. How did the Lord show his approval of their



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## Inspiration of Sorrow

"Had David spent no darksome hours,  
His sweetest songs had ne'er been ours."

## The Power of a Word

RICHTER said: "Words are often everywhere as the minute-hands of the soul, more important than even the hour-hands of actions."

Whether this be true or not, we do know that He who gave to man the power of speech said that there is life or death in the power of the tongue.

Happy is he who can so direct his speech that he can thereby influence for good the destinies of men. Harlan Page once went through his Sunday-school to ascertain its spiritual census. Coming to one of the teachers, he said, "Shall I put you down as having hope in Christ?" The teacher replied, "No." "Then," said Mr. Page, very tenderly, "I shall put you down as having no hope." He closed his little book in which he was taking the record, and left him. That was enough to arouse a conviction in the young man that gave him no rest until he found hope through the cross of Christ.

A man stopped a preacher in London, and said, "I once heard you preach in Paris, and you said something which has, through God, been the means of my conversion." "What was that?" asked the preacher. "It was that the latch was on our side of the door." "If any man hear my voice, and open the door," says Jesus, "I will come in to him, and will sup with him."

Perhaps more persons have been influenced to a life of usefulness by some word said to them in their childhood than by any other means. The following incident is an interesting illustration of this character:—

The carpenter set up his ladder against the house, and prepared to make the modest repairs which the church trustees had ordered upon the rented cottage that served as a parsonage for the new minister. To the minister's small boy the occasion was one of importance and delight. He played around the foot of the ladder, and plied the carpenter with questions,—what was this tool for, and how did he use that one, would that saw cut a man's leg off, and all the other foolish questions which a boy with intellectual curiosity will ask of any man who is willing to listen. The carpenter was a kindly man, and answered the boy's inquiries, and now and then asked a question of his own.

"What's your father's business, sonny?" he inquired.

"He's a minister," answered the little lad.

"Well, now, that's fine, isn't it?" said the carpenter. "Just to think of living to do good; telling people how to do right, and sort of helping them to do it! Nothing in the world could be so fine as that!"

The boy looked up, a little surprised at the warmth of the carpenter's word. To him it seemed a much finer thing to be a carpenter, climbing tall ladders and working with sharp and shiny tools. The man, with his foot on the ladder, went on:—

"Yes, sir, that's the very finest thing that can be. Now being a carpenter's a great thing. Jesus was a carpenter, and if a man can't preach, why, there isn't anything better than to be a carpenter. But to be a minister, and just to live to help people to be good, why, nothing in the world could be so fine as that!"

The words made a deep impression on the boy. He received them as from one of high authority, a man who could erect tall ladders, and could climb up on houses, and could make things out of wood. Not for a moment did he doubt that to be a carpenter was one of the best things in the world, and to have so great a man speak so of his father's profession set him to thinking.

This small boy had been born in the home of a home missionary, and had spent his few years in moving from one small parish to another. He had not failed to honor his father, nor to count him the greatest and best man in the world, but his father's profession, on the one hand, had been the simply natural thing, and on the other, had represented certain restrictions and hardships for the boy. The words of the carpenter gave him a new reverence for his father's profession and that which it represented.

Years passed, and the young man saw things in a different perspective. Yet all through his college course, as he thought of his own life-work, the words that he had heard in boyhood came back to him, and ever with a profounder sense of their truth.

One day he stood before a council of ministers to be ordained to the ministry, and was asked to relate his Christian experience.

He told of the home influences, and the early life of piety and of aspiration, of his father's hopes and his mother's prayers, and then told the incident as here related. Said he:—

"I do not know how it will seem to you, or whether I can make you understand just how that word impressed me as a boy, nor how the feeling that it inspired recurred at intervals through the years; but I think no one incident has meant more to me. In a very true sense, I think I can say of it that that was my call to preach. It gave me a new measure of my father's life, and that for which he wrought and sacrificed; and I have been unable to escape the conviction that nothing could be so fine as that."

## How Babies Are Treated in Arabia

BABIES in Arabia are rubbed with brown powder as soon as they are born, and their eyelids are painted. Then, instead of being dressed in warm, soft flannels, they are wrapped in calico, and tied up like a bundle so that they can not move hands or feet. Then tight boots are put on their heads, with blue beads sewed on the front to keep off the evil eye. These babies cry a great deal, and I should think they would. They can not move, and the flies and other insects crawl over them and bite them, and the sand gets in their eyes and hurts them. Poor little things! When a baby is about six weeks old, a sacrifice is offered, and the baby's hair is cut and weighed, and the same weight in silver is given to the poor. If he hasn't more hair than some of our six weeks' babies, its weight in gold, or even diamonds, might be given and not make the poor much richer or the parents much poorer. The mother puts charms on his neck and arms, and a verse from the Koran is written and put in a little silver or leather case, and hung about his neck to keep him from evil and make him a good Mohammedan. If he is sick, this is his medicine: a verse from the Koran is written with ink on paper; then the ink is washed off, and the inky water is given him to drink. I wish you could see the funny little cradles these babies sleep in. They are made of date sticks fitted together. The rockers are almost flat, so when the poor thing is rocked he is shaken up so that it is a wonder he is not seasick. I am sure any good American baby would rebel.—*Record of Christian Work.*

I DON'T think much of a man who is not wiser today than he was yesterday.—*Abraham Lincoln.*