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OUR CONTRIBUTORS

A VOICE FROM THE COUNTRY

BENEATH a mystic veil of azure sky,
In aisles of green the summer woods extend;
Above a mossy carpet, lightly spread
With shadows dark, the graceful branches bend.
Oh, go and rest beneath the cool, green boughs,
And listen to God's music all around;
View nature's varied beauties everywhere,
And joy in harmony of sight and sound!
There is no purer prospect than the fields
Spread out in rural beauty in the sun;
There is no music like the lilt of birds,
The wind's soft whisper, or the wild bee's hum.
The pine trees murmur songs of matchless tone
To ears attuned to catch their gentle sigh;
Exalted pleasure hides, and gently drifts
With fleecy clouds across the summer sky.
What matter if of paintings we have none,
Or harpstrings never charm our eager ears?
We dwell mid scenes surpassing art's best work,
And listen to "the music of the spheres."
MINNIE ROSILLA STEVENS.

HAWAII AND THE HAWAIIANS Ancient Dress

MRS. THURSTON, one of the first missionaries to Hawaii, thus describes the native dress in 1820, the time of her arrival:—

"Soon the islanders of both sexes came paddling out in their canoes, with their island fruit. The men wore girdles, and the women a slight piece of cloth wrapped around them, from the hips downward. To a civilized eye, their covering seemed to be revoltingly scanty. But we learned that it was a full dress for daily occupation.

"As we approached, Kawaihae Hopu (a native who had spent some time in America, and had become Christianized) went ashore to invite on board some of the highest chiefs of the nation. Kindly regarding the feelings of the ladies, he suggested that they put on garments; so they prepared for the occasion. Kalanimoku was the first person of distinction to come. In dress and manners he appeared with the dignity of a man of culture. He was first introduced to the gentlemen, with whom he shook hands in the most cordial manner. He then turned to the ladies, to whom, while yet at a distance, he respectfully bowed; coming nearer, and being introduced, he presented to each his hand.

"Kalakua (Kah-lah-koo-ah), with a sister queen, next welcomed us with similar civilities. Kalakua was the mother of three of the wives of the young king. Two wives of Kalanimoku followed. They were all attired in a similar dress, with the addition of the *pau* (pah-oo), which consisted of ten thicknesses of bark cloth three or four yards long, and one yard wide, wrapped several times around the body, and confined by tucking it in on one side. The two queens had loose dresses over these,

"Trammeled with clothes and seated on chairs, the queens were out of their element. They soon divested themselves of their outer dresses. Then one stretched herself full length upon a bench, and the other sat down upon the deck. Mattresses were then brought, that they might recline in their own way.

"After reaching the cabin, the common sitting-room for ladies and gentlemen, one of the queens divested herself of her only remaining dress, simply retaining her *pau*. While we were opening wide our eyes, she looked perfectly self-possessed and easy.

"From Kawaihae the chiefs and their large retinue all sailed with us to Kailua, where the king resided. They all slept on deck on their

Young's rule to his Mormon damsels,—Have it come down to the tops of the shoes. But in the queen's case, where the shoes were lacking, the bare feet showed very prominently.

"May 4, Tuesday, one hundred and sixty-three days from Boston, the 'Thaddeus' was anchored before Kailua. The queen dowager, Kalakua, assumed a new appearance. In addition to her newly made white dress, her person was decorated with a lace cap ornamented with a wreath of roses, and a lace half-neckchief, in the corner of which was a most elegant embroidered sprig of various colors. These were presents we had brought her from some American friends. When she went ashore, she was received by hundreds with a shout.



A NATIVE FEAST

mats. Kalakua bought a web of white cambric, to have a dress made for herself in the fashion of those of our ladies, and was very particular in her wish to have it finished while sailing along the western side of the island, before reaching the king.

"Monday morning, April 13, the first sewing-circle was formed that the sun ever looked down upon in this Hawaiian realm. Kalakua, queen dowager, was directress. She requested all the seven white ladies to take seats with them on mats, on the deck of the 'Thaddeus.' Mrs. Holman and Mrs. Ruggles were executive officers, to ply the scissors and prepare the work. The four native women of distinction were furnished with calico patchwork to sew, — a new employment to them.

"The dress was made in the fashion of 1819. The length of the skirt accorded with Brigham

"April 6 the king and his family dined with us by invitation. The king was introduced to the first white women, and they to the first king, that each had ever seen. His dress on the occasion was a girdle; a green silk scarf put on under the left arm, and brought up and knotted over the right shoulder; a chain of gold around his neck and over his chest; and a wreath of yellow feathers upon his head."

In describing a feast to commemorate the death of Kamehameha I, Mrs. Thurston says: "The king departed from his usual custom, and spread a table for his family and ours. There were many thousands of persons present. The king appeared in a military dress, with quite an exhibition of royalty. Kamam Iu, his favorite queen, applied to me for one of my dresses to wear on the occasion; but as it was among the impossibilities for her to assume it, the re-

quest happily called for neither consent nor denial. She, however, according to court ceremony, so arranged a native cloth pau, a yard wide, with ten folds, as to be enveloped around the middle with seventy thicknesses. To array herself in this unwieldy attire, the long cloth was spread out upon the ground; then, beginning at one end, she laid her body across it, and rolled herself over and over till she had rolled the whole around her. Two attendants followed her, one bearing up the end of this cumbrous robe of state, and the other waving over her head an elegant nodding flybrush of beautiful plumes, its long handle completely covered with little tortoise-shell rings of various colors.

"Her head was ornamented with a graceful wreath of yellow feathers, of great value, from the fact that after a bird of the kind from which these feathers were obtained had been caught in a snare, only two small feathers of rare beauty, one under each wing, could be had from it. A mountain vine with green leaves, small and lustrous, was the only drapery which went to deck and cover her neck and the upper part of her person. Thus this noble daughter of nature, at least six feet tall and of comely proportion, presented herself before the king and the nation, greatly to their admiration. After this presentation was over, her majesty lay down again upon the ground, and unrolled the cloth by reversing the process of clothing."

The accompanying illustration gives a correct idea of the serving of Hawaiian feasts, mentioned and described in the INSTRUCTOR of June 14. It also shows the dress and general appearance of the Hawaiians at the present time.

LENA E. HOWE.

A CURE FOR CARELESSNESS

A SUCCESSFUL business man has said that he learned two things when he was eighteen, that were ever afterward of great use to him; namely, "never to lose anything, and never to forget anything." An old lawyer sent him with an important paper, with certain instructions what to do with it.

"But," inquired the young man, "suppose that I should lose it, what shall I do then?"

"You must not lose it," said the lawyer.

"I don't mean to," said the young man; "but suppose I should happen to?"

"But I say you must not happen to. I shall make no provision for such an occurrence; you must not lose it."

This put a new train of thought into the young man's mind, and he found that if he was determined to do a thing, he could do it. He made such provision against every contingency that he never lost anything. He found this equally true about forgetting. If a certain matter of importance was to be remembered, he pinned it down on his mind, fastened it there, and made it stay. He used to say: "When a man tells me that he forgot to do something, I tell him he might as well have said, 'I do not care enough about your business to take the trouble to think of it again.' I once had an intelligent young man in my employ who deemed it sufficient excuse for neglecting an important task to say, 'I forgot.' I told him that would not answer; if he was sufficiently interested, he would be careful to remember. It was because he did not care enough that he forgot. I drilled him with this truth. He worked for me three years, and during the last of the three he was utterly changed in this respect. He did not forget a thing. His forgetting, he found, was a lazy and careless habit of the mind, which he cured."—*The Country Gentleman.*



"SUFFICIENT UNTO THE DAY"

ONLY one day at a time, dear heart,
Only one day at a time;
One day's sorrows and cares and joys
To weave into soulful rhyme.
One day's journey along the way,
Toilsome and rough and drear.
Courage, dear heart! soon cometh the night;
Then will come rest, don't fear.

Bright and cheery the sun may rise
Over the morrow's way,
Turning the rocks to nuggets of gold,
Chasing the shadows away.
Give thyself to its cheering power,
Gather its shining gold;
Store it away for a darker hour,
When sunny skies grow cold.

One day's burden thy hands may bear,
Nay, 'tis enough, dear heart!
Borrow not aught of to-morrow's care,
Cheerily bear thy part.
Strength shall be given thee, hour by hour,
With moments slow or fast;
One by one they will glide away
Into the shadowy past.

—*The Housekeeper.*

HE BEGAN TOO LATE

A FEW evenings ago there sat in my office a young man, scarcely more than twenty years of age, who had just been released from a State reform school, to which he had been committed on a number of serious charges. I was anxious to know about his home influence, childhood, early experience, etc., and, with no little interest I asked, "My brother, were your parents Christians?" To my surprise he answered, "Yes, father and mother were both earnest Christians."

I was silent for a moment. I thought: How can it be,—father and mother earnest Christians, and yet this lad had gravitated on down through sin and iniquity, tobacco-using and liquor-drinking, into vice and crime that carried him to prison!

I next ventured to ask, "Did you believe in Christ?"

He answered, "Yes, I believed in religion, but —"

"But what?" I asked; and with tears in his eyes he answered, "*I began too late.*"

Oh, yes, I thought to myself, I understand your story now. Yes, he was one of those young men who grow up with more or less gospel influence surrounding them. His parents were church-members; perhaps not so earnest as they might have been, but still they tried to raise their children right. He told me his father was sober and honest, and his mother a praying woman. But little by little he had neglected and rejected the light of heaven and the pleadings of the Spirit of God within his soul; step by step he had passed down the stairway that leads from the path of rectitude and purity to that of vice and immorality. Inch by inch he had given way to the advances of the enemy, and as a consequence, day by day he continued to drift farther and farther from principles that were pure and high and holy; while his mind became more and more poisoned with the thoughts and plans of the evil one. And thus a hundred little steps away from God and the right—a hundred little sins—had accomplished the work of searing the conscience, polluting the morals, and contaminating the soul.

I longed to give him an opportunity to redeem himself; and I purposed in my heart, if

it were possible, to help him rise from the pit into which he had fallen; but I shall never forget those words that he spoke in answer to my question,—"*I began too late.*" I gave him an opportunity; but I, too, found that he had begun too late. One of his first acts, in return for the kindness shown him, was to steal his roommate's purse, after which he fled, and I have not seen him since. But the memory of this young man lingers in my mind; and I would that I might cry aloud to every young man and every young woman who has grown up with the blessed privilege of knowing the truth, and tell them of the danger of remaining indifferent to the light they have received, or of neglecting the claims of God upon their souls.

My young friends, you and I are responsible for every ray of heavenly light and truth we have received: then shall we not, instead of day by day allowing thoughts of God and his love to slip out of our minds, lay fast hold of truth and righteousness; buy the truth and sell it not, but be willing to lay down our lives, if need be, for it; and no longer be indifferent to the claims of the special, distinctive truth that we profess? With a sense of the solemn times in which we live, and of our great responsibility as the younger soldiers of the Lord's army, resting upon us, let us seize the banner of truth, fly it to the breeze, and go forward in the name of the Lord to garner sheaves for the soon-coming harvest.

W. S. SADLER.

FIGHTING TEMPTATIONS

THE true way to conquer temptations is not to fight them in detail, but to go up into a loftier region, where they cease to be temptations. How is it that grown men do not long for the sweetmeats that used to tempt them when they were children?—They have outgrown them. Then outgrow the temptations of the world! How is it that there are no mosquitoes nor malaria on the mountain-tops?—They can not rise above the level of the swamps by the river. Go up to the mountain-top, and neither malaria nor mosquito will follow you—which, being interpreted, is, live near Jesus Christ, and keep your hearts and minds occupied with him, and you will dwell in a region high above the temptations that buzz and sting, infest and slay, on the lower levels.—*Alexander MacLaren, D. D.*

THY GOD WILL DELIVER THEE

THE last message that King Darius gave Daniel as he went into the den of lions must have been encouraging to God's tried servant. It was a remarkable statement to come from a heathen king. The king saw that he had been entrapped by the leading men in his government, and had unsuspectingly put his signature, as far as human foresight could see, to the death-warrant of the chief man in his kingdom. He reproached himself for not seeing the intent of the writing, and until the going down of the sun, he did all he could to save Daniel. But the purpose could not be changed concerning this servant of God, so the king commanded that he be brought. As Daniel stood before the king, innocent, his face beaming with intelligence and love, a man far above political strife, who stood firmly upon principle for the good of the poor and oppressed, the king's heart yearned over him; and his parting words were, "Thy God whom thou servest continually, he will deliver thee."

It was Daniel's whole-hearted service of God that made him great. In his trouble Belshazzar said of him, "I have even heard of thee, that the spirit of the gods is in thee, and that

light and understanding and excellent wisdom is found in thee." This was all so, and all these gifts came because Daniel served God continually, and God was with him. Daniel gave God all the glory for the wisdom displayed through him. Listen to the noble words spoken before Nebuchadnezzar when his dream was explained by Daniel: "But as for me, this secret is not revealed to me for any wisdom that I have more than any living, but for their sakes that shall make known the interpretation to the king, and that thou mightest know the thoughts of thy heart."

During the night that Daniel was in the den, God was testing the leading men of the Medes. Some rejoiced at what they supposed to be the fate of the chief man in the empire; but had they known how soon their turn would come to visit the den, they would not have been so exultant. The king passed the night fasting, and, as far as he knew how, resting hope in Daniel's God. No doubt he broke the decree himself by praying for Daniel's deliverance.

At the earliest possible moment he hastened to the den. The royal seal was broken, the stone was rolled back. Then with a "lamentable voice" he called to Daniel, "Daniel, O Daniel!" Why did he not listen to hear some word from him first? No, the king called to Daniel first. In this he manifested faith that, inexplicable as it seemed, Daniel was alive. Notice that Daniel's God was on test. Darius continues: "Daniel, O Daniel, servant of the living God, is thy God, whom thou servest continually, able to deliver thee from the lions?" What a searching question! What awful consequences await the answer! Shall the king hear Daniel's voice again? or is the mighty ruler no more among the living?

Then said Daniel: "O king, live forever. My God hath sent his angel, and hath shut the lions' mouths, that they have not hurt me: forasmuch as before him [God first] innocency was found in me; and also before thee, O king, have I done no hurt." Then the king was "exceeding glad." Surely there is a God, and he is truly a living God, and one able to deliver his believing, faithful, innocent servants from peril and death!

Some thought the lions were not hungry. That delusion was soon dispelled when all those wicked men and their families were cast into the den. The record says: "The lions had the mastery of them, and brake all their bones in pieces or ever they came at the bottom of the den."

Daniel's God still lives. He is still able to do for us exceeding abundantly above all that we can ask or even think. Shall we walk so humbly and so constantly before him, as did Daniel, that through us he can magnify his own name, causing others to say, "He is the living God;" "he delivereth and rescueth, and he worketh signs and wonders in heaven and in earth"?

T. E. BOWEN.

DON'T ANSWER IMPERTINENT QUESTIONS

IMPERTINENT questions are to be met with firm and dignified politeness. Any question about another's personal affairs, about the price of one's clothing, the amount of one's earnings, the reasons one has for entirely private conduct, is impertinent. Would I answer such questions?—Not at all. Usually, by a little tact, one can settle such questioners. If there is no other way, I counsel a plain but courteous sincerity—a simple refusal to answer. One may just say, "Pardon me, I prefer not to give any information whatever on this matter."—Margaret E. Sangster, in *Ladies' Home Journal*.



MIGNONETTE AND SWEET ALYSSUM

WHEN I fix my yard in spring,
'Fore the leaves hes started yet,
I begin to plan, first thing,
Fer my beds of mignonette.
One down here beside the gate,—
Kep' it there sence 'sixty-nine,—
One up yonder, where the late
Sunbeams likes to set an' shine.
They 're sech cozy, lovin' flowers!
I could jest kneel down an' kiss 'em,
Pet an' fuss with 'em fer hours—
Mignonette an' sweet alyssum.

Yes, an' sweet alyssum, too;
Most folks hes their preferences.
Some likes hollyhocks, a few
Growin' stately by the fences.
Some likes lilies, straight an' white;
Well, they 're sweet enough, land knows!
An' the good Lord puts a sight
Of his comfort in a rose.
Then the clovers, crowdin' clost—
I should aw'f'ly hate to miss 'em!
But there 's two that I love most—
Mignonette an' sweet alyssum.

Some folks says there 's flowers above.
Scriptur 's silent there, I know;
But I think the God of love
Surely must hev fixed it so.
Ef it really was n't wrong,
I could almost make a prayer—
Thet I 've loved 'em here so long,
An' I want to find 'em there.
They 're old friends I 've planned to meet,
An' I don't expect to miss 'em,
Growin' by the golden street—
Mignonette an' sweet alyssum.

— Mabel Earle.

15—SORREL

THE sorrels are so common and familiar that it may seem almost unnecessary to mention them; but I have found that some have no names of distinction, by which to separate the three most frequently met with.

The little yellow Wood-Sorrel, or Lady's-Sorrel, is very common in June in meadows,



YELLOW WOOD-SORREL.

woodlands, pastures, and even upon city lawns in moist, cool places. It snuggles down in the grass, and is to be found all through the summer months. The flower is a bright, rich yellow, which gives the plant the name of Yellow Wood-Sorrel. The leaf bears some resemblance to the clover leaf, and has the peculiar characteristic of doubling in upon itself at night, or whenever the sun is too hot for it.

The White Wood-Sorrel is easily distinguished by its white, crimson-veined blossom.

It has been used by artists for hundreds of years in floral designs and ornamentations. The flower is something like that of the anemone, but the leaves will easily lead one to a right notion of its place in the floral world. Unlike the Yellow Sorrel, the flower-stem of the White Sorrel bears but one blossom.

F. S. Matthews has something to say with reference to Sheep-Sorrel: "Sheep-Sorrel is a wretch of a weed, which will flourish in sandy or sterile ground, and is the bane of the farmer who tries to raise clover for his cattle. Sorrel seed is so much like clover seed



WHITE WOOD-SORREL.



SHEEP SORREL.

that the two get mixed up sometimes, to the utter discouragement of the farmer. I think the plant ought to be called 'farmers' bane.' It belongs to the buckwheat family, and so can claim no relationship with Wood-Sorrel, which belongs to the Geranium family. I have seen a whole field as ruddy-looking as if it were filled with honest ripe buckwheat; yet the pretty terra-cotta color was produced by the flowering of this miserable Sheep-Sorrel."

L. A. REED.

BIRD MOTHER-LOVE

ONCE while riding along a country byroad, I espied a small clump of rosebushes by the roadside. The flowers looked so inviting that I determined to pick a few of the choicest buds, but I had gathered only a few when my attention was attracted by the quick, sharp cries of a female meadow-lark.

Looking in that direction, I saw the bird fluttering and trembling along on the ground. It was apparently in the greatest distress, as if with a broken leg or wing. Determined to investigate, I crawled through the fence, and advanced slowly to the spot where the bird was. It moved slightly, but apparently with considerable difficulty. As fast as I approached, it receded, so that I was unable to get any nearer than within a few feet of it. After I had followed the bird about ten yards, it suddenly arose in the air, all unimpeded, with loud, sonorous notes of joy. The feathered hypocrite had been leading me from her nest.

I immediately retraced my steps, and resumed the picking of the roses. Again and again the bird tried the same tactics; but seeing that I did not heed her, she suddenly dropped all her strategy, and began drooping her head, and beating her wings on the ground. She uttered a few low, moaning tones, as if pleading with me not to disturb her nest. I could not withstand this last appeal, so I hastily climbed back into the carriage, without getting half the flowers I wished. No human being could have expressed more joy than did this mother bird then. Up into the air she rose, circling about, giving vent to her ecstasy in rapturous bursts of melody.

J. J. THOMAS.



THEIR COST

How cheap are the things that are bought and sold,
The beautiful things that the hands can hold,—
Whatever is purchased with silver and gold!

The merchants are calling, and filling their rooms
With jewels and laces and rarest perfumes,
And wonderful webs from the Indian looms.

The price of the treasures is small, as they say;
For dollars and cents are exchanged every day
The furs of the North-land, the silks of Cathay.

But oh, the rare things that can never be brought
From far-away countries, but still must be sought
Through working and waiting and anguish of thought!

The patience that comes to the heart as it tries
To hear, through all discord and turbulent cries,
The songs of the armies that march to the skies;

The courage that fails not, nor loses its breath
In stress of the battle, but smilingly saith,
"I'll measure my strength with disaster and death;"

The love that through doubting and pain will increase;
The longing and restlessness calmed into peace,
That is perfect and satisfied, never to cease—

These, these are the dear things. No king on his
throne
Can buy them away from the poor and unknown
Who make them, through labor or anguish, their own.
—Selected.

JULY STUDY OF THE FIELD

PART II: "THE MEXICAN PEOPLE
AND CUSTOMS"

(July 8-14)

1. *Homes of the Poor.*—It is difficult to express in words, to those who have not had the opportunity of judging for themselves, the degraded condition of the mass of the laboring classes in Mexico. The idea of home life, as we know it, is wanting. The independent house in the city is unknown. A room, or rooms, on the ground floor, where there is little light and practically no ventilation, probably only a single opening,—that for entrance,—with dirt floors and no drainage, constitutes the home. In the suburbs and the country the dwellings in the cold regions are of adobe; but in the temperate or warm regions, they are mere huts of cane or of stakes, wattled with twigs, and roofed with cornstalks, plantain leaves, or brush. In such houses there is rarely anything answering to the civilized idea of a bed, the occupants sleeping on a mat, skin, or blanket on the dirt floor. There are no chairs, tables, fireplaces, or chimneys; few or no changes of raiment; no washing apparatus nor soap. In fact, there is no furniture whatever, except a flat stone with a stone roller, to grind the corn, and a variety of earthen vessels to hold food and drink, and for cooking. This last operation is generally performed over a small fire, within a circle of stones, outside, and in front, of the main entrance to the dwelling. These rooms, decidedly inferior in comfort and neatness to those of the negro of the South during the state of slavery, are as full of life as they are bare of furniture, the pet animals sleeping in the same room with the family. All huddle together at night on the mat or other improvised bed, with a roll of old rags for pillows, or with no pillows at all. Such living naturally invites disease; and the

wonder is, not that so many die in infancy, but that any live, and grow to maturity.

2. *The Maguey, or Mexican Aloe.*—No plant of Mexican soil is more highly appreciated than the maguey, or hothouse century plant. It grows wild upon the mountains, springs up in uncultivated places as a weed, is cultivated as a domestic plant in little patches, and is also planted in fields of leagues in extent. The uses to which this plant is applied are more numerous than the methods of cultivation. When its immense leaf is pounded into pulp, it forms a substance from which both cloth and paper are made. The fiber of the leaf, when beaten and spun, forms a beautiful thread, resembling silk in its glossy texture, but which, when woven into a fabric, more nearly resembles linen than silk. This thread is the sewing-thread of the country. The leaf of the maguey, when crudely dressed, and spun into a coarse thread, is woven into sailcloth and sacking, and from it is made the bagging in common use. The ropes made from it are of that kind called Manila hemp. It is an excellent material for wrapping-paper. When cut into coarse straws, it forms the brooms and whitewash-brushes of the country; as a substitute for bristles it is made into scrub-brushes; and finally, it supplies the place of hair-combs among the common people.

3. *The National Beverage* is the fermented juice of the maguey, called "pulque;" and for this more than any other use made of it, the plant is valuable. Until the plant has reached its tenth year or thereabouts, there is no trace of bloom. The cultivator understands his plants so perfectly that he can detect just the time when the flower-spike is about to develop. He then makes an incision, extracting the whole heart, upon which the flower would eventually appear, leaving a natural basin often two feet deep and one and one-half feet in diameter. This rapidly fills with the juice of the plant, called *agua miel*, or honey water, which would have nourished the flower, had its development not been checked. This juice is gathered three times a day for two or three months, a single plant producing from sixty to one hundred and twenty gallons, after which it dies. The process of collecting the liquid is curious. A siphon is made of a long gourd, with a cow's horn at one end. The collector sucks the juice up into the gourd, pouring it, as rapidly as it is filled, into sheepskin bottles, conveyed upon the backs of patient donkeys to the barns where the pulque is made. Here it is emptied into vats; and some of the liquid, previously fermented, is placed in it, operating like yeast. In twenty-four hours the pulque is ready for sale. The liquor resembles *koumiss* in appearance; contains water, gluten, and alcohol; and has the odor of rancid meat. It is not only sold in shops, but is peddled throughout the country. The revenue to the government from this production is immense.

4. *The Love of Gambling* is one of the strongest traits of the Mexican character, and to it may be traced much of the moral and political degradation of the people. There is no distinct class in Mexico known as gamblers, but the vice is everywhere prevalent. It is said that at one time it was no uncommon sight to see the president of the republic and his chief officials gambling with priests and ragged lepers. When their simple wants are satisfied, money with them has little value, and quickly finds its way into the pockets of the almost

omnipresent pulque or lottery-ticket vender, or the priest.

5. *Child Life in Mexico.*—A glimpse at the life of the children of the poor is sufficient to convince the most doubtful that a transformation in the character of a Mexican means a change beginning with childhood. Babies, cats, dogs, pigs, and chickens revel together in the filth of the little yard that is, perhaps, the outlet of several miserable homes. The baby looks as if it had not been washed for days—perhaps it never has had a bath. Its clothes are pieces of old cloth or calico,—a little skirt, a calico waist, and perhaps an old apron wrapped about its legs. It may lie for hours on the straw mat that serves as a bed. In some houses a hammock made of four boards fastened together at the corners, with a piece of strong cloth loosely tacked over them, serves as the baby's bed. This is suspended from the rafters overhead. The children early learn to creep, and are taught to walk so soon that many become bow-legged, or even lame. Babies are allowed to eat everything; beans, tortillas dipped in chili sauce, fruit that is green or overripe, and even pulque, are given them. Small children are taught to work. Little ones scarcely able to toddle by the side of their mothers carry small bundles on their heads. When five or six years old, they carry babies so heavy that they can barely stand under the burden. The girls in the home have to grind the corn for tortillas (corn-cakes), carry water, and help in other ways. The boys also have their tasks, which, however, they shirk as often as possible, and waste their time in gambling. In many parts of the country there are no schools; and the children grow up without an education, learning, however, to lie and steal, beg and gamble, and drink pulque, which makes them drunk and stupid. Among these children of the poor there are some who are kind, patient, happy, loving little helpers, just such as we find in other lands; but in their present condition, their lives are hopeless. The gospel alone will uplift them, and we who know its blessedness are responsible for its reaching them. A broad field of usefulness is open to the teachers who will train these little ones for the Master.

HOME SUNBEAMS

"MILDRED is a perfect sunbeam in the house," said a dear old lady, speaking of her granddaughter, some time ago; and ever since I have looked at that girl admiringly. For it was not spoken of one whose life is so surrounded with luxury that she has never known care or hardship, but of one who is bravely earning her own way. Nor was it the fond remark of a doting grandmother, who had Mildred only as an occasional visitor, and so saw her only in her happiest moods. It was the verdict of one who lived under the same roof, and who, in her declining health, needed much of care and tenderness; but her face lighted as she spoke the dear name, and in that brightening face was a wonderful tribute to a girl's beautiful character.

So many girls—girls with heart, conscience, and the best of intentions—are anything but sunbeams. Some of them are whirlwinds; they keep the house in a commotion with their comings and goings, their plans and projects, which sweep everything else out of the way. Some of them are like a fog, and settle down upon the household in a dull, depressing way whenever the sky is clouded. But the sunbeam girl—who is a genuine sunbeam in her own home—is rarer than we wish she were. May her ribe increase! — *Well-Spring*.



DROPPED STITCHES

GRANDMOTHER smiled as she sat there rocking,
And leisurely knitting a long black stocking.
The girls were telling what they would do
If their dreams of unlimited wealth came true.
And, "What would *you* do, dear grandma?" said
The girl whose visions came out ahead.

Said grandma: "If I'd unlimited riches,
I'd buy me some needles that would n't drop
stitches!"

"But it wouldn't matter," said one of them. "Then
You never need pick them up again."

Grandmother shook her pretty white curls.

"Listen to me," she said, "my girls.

"No matter how high your wealth may mount,

Dropping stitches will always count!"

Grandmother never sticks them in —

The morals — with a needle or pin;

She simply puts them up on the shelf,

And leaves them for you to help yourself.

— Margaret Vandegrift.

A PROBLEM IN DIVISION

WHILE Ted and baby were taking their mid-day nap, five-year-old Tom went into the garden for a walk with mama. It was the end of June, and the red raspberries were just beginning to turn color: yes, here was a ripe one; and there was another, and another. By the time they had gone the length of the two rows, they had found eight beautiful, bright berries.

"Take them in, Tom," said mama, "and divide them among you. I must get some lettuce for dinner."

When she came in, a few minutes later, there were two neat little groups of berries on the table,—three for Ted, three for baby. Tom had eaten his two berries and returned to his play. He was only a little fellow, and did not know much about arithmetic; but he could divide eight berries among three children, and have no remainder. Can you?

AUNT BETTY.

THE PROGRESSIVE BEAN

TEDDY was eating his beans with a very enthusiastic appreciation of their merits.

"Teddy," said his father, suddenly, "suppose you were to see a dry, white bean start suddenly to grow, sprouting first, then sending out two green leaves, then some roots, the stem growing longer all the while, and other little leaves coming out,—and all within two minutes' time?"

"Why, papa!" cried Ted, "that is a regular 'Jack and the Beanstalk' story! Such things don't happen, really and truly. You know they don't, papa!"

"Well," said papa, laughing, "I can show you something out in the garden that seems a good deal like that story. You come out with me after dinner, and I'll show it to you."

You may be sure Ted was ready when dinner was over. He had skipped away for his cap, and was back again in a twinkling.

A moment later the little boy and his father were walking through the bit of orchard behind the house toward the garden.

"Two weeks ago, Ted," said his father, "I planted a dry, hard bean out here; and the second morning after that I planted another, and every other morning since then I have

planted a bean. The last one I put in the ground this morning. See, here it is!" And Ted's father began to draw the earth away from a bit of stick that was stuck in the ground. "It is hard and dry, just as it was this morning. Now we'll look at the one I put in the day before yesterday morning."

In a moment that one was dug up.

"See! it has swollen a little in the damp earth," his father continued. "I'll split it open down the middle, and you'll see a tiny bit of stem at one end, lying curled up between the two halves of the bean."



* Bean split in two; (a) the first stem; (b) the first true leaves slightly enlarged.

"Yes; there it is!" cried Ted, growing interested.

"Now we'll look at the one planted two days before that," said his father. "Ah, this is swollen still bigger; and I can open it with my fingers, the outside covering is so soft."

"The little stem has grown bigger, and is trying to straighten out," said Teddy.

"Here's the one planted two days before that."

"Why!" cried the little boy, excitedly, "the little stem has come out through the outside covering, and the two halves of the bean have spread apart at the other end!"

"See this one that is two days older still," said Ted's papa, smiling to see how interested his little boy was getting.



The young stem of the seedling bean pulling the seed-leaves out of the ground.

"That? Why, that's a regular little plant! And, oh! how funny! The two halves of the bean stand up just like two leaves!" And Ted opened his eyes very wide indeed.

"Here's the next member of this interesting family."

"That has little roots starting down from the stem; and those two halves of the bean are turning green, just like real leaves," cried Ted, looking closely at the little plant.

"We won't have to dig up the next plant," said papa. "It has poked its head up through the ground, and you can see a bit of stalk growing up between the two halves of the bean, that are still greener than the last ones."

"And here, in the last one, the bit of a stalk has sent out two real little leaves," said Ted, walking along to the spot where the first bean of all was planted, two weeks before. "It's a regular little plant now," he said. "But was the little plant in the bean all the time, papa?"



(a) First stem of bean-plant; (b) a seed-leaf; (c) a bud; (d) heart-shaped leaf.

"It was curled up there in the bean all the time. If John will give you some peas, you may try the same experiment, and see how peas grow."

But before papa had finished, two small legs were flying down the path to find John, the gardener.—

Religious Herald.



COLOR-SCREENS AND RAY-FILTERS

IN photographing clouds, flowers, paintings, or anything that has several colors, the use of a color-screen and orthochromatic plates will wonderfully improve the picture. Without the screen, an ordinary plate will make green, yellow, orange, and red of almost the same degree of blackness; while the other colors are rendered almost equally white. The screen and orthochromatic plates tone down this contrast, and give to each plate nearly its true value. Instead of the color-screen a chemical ray-filter is often used for the same purpose.

Both color-screens and ray-filters may be bought at the stock-house; but either can be made with very little trouble. Here is the formula for a color-screen: Dissolve thirty grains of aurantia in one ounce of alcohol; then add one ounce of ether and twenty grains of pyroxaline. Take a thin glass plate (a lantern-slide, cover-glass, or even a spoiled negative that has been cleaned, will do), and pour a small quantity of the solution in the center of it. Tip it from side to side until the plate has been evenly coated over its entire surface. Set it away to dry, and then coat a second and a third plate in the same way. When the plates are dry, two of them should be given a second coat; and when these are dry, one of them may be coated the third time. This will give you screens of three different densities. The denser the screen, the more violet rays will be shut out, and the longer the plate will need to be exposed.

These screens may be used either in front or behind the lens, and may be suspended in any convenient way. They do not usually give as good orthochromatic results as the ray-filter.

A ray-filter consists of an appropriate glass tank filled with a solution of bichromate of potash. A bottle having thin, flat sides entirely free from air-bubbles would answer just as well as a tank made especially for that purpose. I have never been able to find such a bottle when I wanted one, though I have seen them at other times. If you succeed in getting one, all you will need to make a ray-filter will be five cents' worth of bichromate of potash, and some simple contrivance to attach the bottle to the front of the lens. If you are unable to find a suitable bottle, you can make a tank with very little trouble and almost no expense.

Take four fruit-jar rubbers, and from two of them cut a segment about a quarter of an inch long. With some waterproof cement that will adhere to both rubber and glass, cement the rubbers together with the two uncut ones on the outside. This will give you a rubber ring about three eighths of an inch thick. Cement this ring between two thin glass plates, and your tank is complete. If the corners of the glass are cut so as to make them conform very nearly to the size and shape of the ring, there will be much less danger of breakage than if the plates are left square.

To attach this tank to the lens, take a board about three eighths of an inch thick, and just the size of the plates that make the sides of your tank. Cut a hole in the center large enough to fit snugly over the front of your lens. Do not get the hole too large. It should fit so tightly that there will be no danger of its being knocked off by an accidental jar of the camera. This board is cemented to

one of the glass sides of the tank, which is then filled with the filtering solution. When it has been filled, the opening left by the cut-out sections of the two rubbers may be stopped with a wooden plug.

Make a ten-per-cent solution of bichromate of potash (one ounce of bichromate to ten ounces of water); and when you fill the tank, dilute it to the required density. For dark cumuli clouds a two-per-cent solution is dense enough. Light sirrus clouds will require a five- or six-per-cent solution, with a consequently longer exposure. A bouquet of many-colored flowers should be photographed through an eight- or ten-per-cent solution.

In photographing moving clouds, too long an exposure is apt to cause blurring. Too short an exposure, though it may give sufficient detail, is likely to give the sky an unnatural blackness.

It is best to use orthochromatic, or isochromatic, plates with either the color-screen or the ray-filter. These plates are especially sensitive to yellow and orange light, and consequently they give the color values more nearly correct than do the ordinary plates.

Some manufacturers advertise that color-screens are not needed with their "ortho," or "iso," plates, but do not believe such a statement. A common plate, with a color-screen or a ray-filter, will give much truer monochromatic results than the best orthochromatic plates will give without one.

J. EDGAR ROSS.

OUR WONDERFUL BODIES

THE HEART AND THE BLOOD-VESSELS

THE blood-circulating organs are the heart and the blood-vessels. These latter are of three kinds,—the *arteries*, which carry the blood from the heart to the tissues of the body; the *veins*, which return the blood from the tissues to the heart; and the *capillaries*, which are very fine vessels uniting the ends of veins and arteries. They end the arteries, and then gather into larger and larger trunks, thus forming veins. As the veins approach the heart, they form larger trunks, until at last two large veins are formed,—the "descending" and the "ascending" *vena cava*.

Arteries have firm, elastic walls, and retain their shape, full or empty. They have three layers of connective and muscular tissue. Veins have thinner, less rigid walls. They can hold double the quantity of blood that the arteries do. In the veins are valves, which allow the blood to flow but one way—toward the heart.

The heart is a hollow muscle about the size of one's fist; conical in shape, placed between the fifth and sixth ribs and the lungs, which nearly cover it. The heart is inclosed in a sac, called the "pericardium." In this is a fluid secretion, in which the heart moves easily, and by which it is protected from shock. The heart covering is attached to the central tendon of the diaphragm. The weight of the heart is from eight to twelve ounces. A perpendicular muscular partition divides the heart into two halves,—right and left,—and these are again divided into an upper and a lower portion,—four cavities in all. (See diagram.) These cavities are lined with a delicate membrane.

The upper cavities are called the right and left auricles, and the lower cavities are called the right and left ventricles. Each cavity holds about six ounces of blood. The walls of the

ventricles are much thicker than those of the auricles; and the wall of the left ventricle is also much thicker than that of the right.

Each ventricle has two openings—one leading to the auricle on the same side, and the other to an artery. The right ventricle connects with the pulmonary artery, which leads to the lungs; and the left ventricle connects with the aorta, the largest artery in the body. The right auricle has two openings in its outer wall, through which the two largest veins in



RA—Right Auricle. RV—Right Ventricle. LA—Left Auricle. LV—Left Ventricle.

the body (*vena cava*, ascending and descending) empty the blood into the heart. The left auricle has four openings, which receive the blood from four pulmonary veins, two from each lung.

The two openings of the ventricles are guarded by valves, which allow the blood to pass in but one direction. These valves are delicate curtains of membrane. The valve on the right side (between the right auricle and the right ventricle) has three curtains, and is called the "tricuspid valve;" that on the left side has two curtains, and is known as the "mitral valve." There are also the aortic and pulmonary valves, which are called the "semilunar valves." These allow blood to flow from the auricles to the ventricles and into the arteries, but not in the opposite direction.

In our next notice we will see how the blood flows through the body, and will study especially a diagram showing the action of the heart in reference to the circulation.

MRS. M. D. MCKEE.

THE DOCTOR'S PRESCRIPTION

SOME years ago a lady, who tells the story herself, went to consult a famous New York physician about her health. She was a woman of nervous temperament, whose troubles—and she had had many—had worried and excited her to such a pitch that the strain threatened her physical strength, and even her reason. She gave the doctor a list of her symptoms, and answered his questions, only to be astounded at his brief prescription at the end: "Madam, what you need is to read your Bible more!"

"But, doctor——" began the bewildered patient.

"Go home, and read your Bible an hour a day," the great man reiterated, with kindly authority. "Then come back to me a month from to-day;" and he bowed her out without a possibility of further protest.

At first his patient was inclined to be angry. Then she reflected that at least the prescription was not an expensive one. Besides, it certainly had been a long time since she had read the Bible regularly, she reflected, with a pang

of conscience. Worldly cares had crowded out prayer and Bible study for years, and, though she would have resented being called an irreligious woman, she had undoubtedly become a most careless Christian. She went home, and set herself conscientiously to try the physician's remedy.

In one month she went back to his office.

"Well," he said, smiling, as he looked at her face, "I see you are an obedient patient, and have taken my prescription faithfully. Do you feel as if you needed any other medicine, now?"

"No, doctor, I don't," she said, honestly. "I feel like a different person—I hope I am a different person! But how did you know that that was just what I needed?"

For answer the famous physician turned to his desk. There, worn and marked, lay an open Bible. "Madam," he said, with deep earnestness, "if I were to omit my daily reading of this book, I should lose my greatest source of strength and skill. I never go to an operation without reading my Bible. I never attend a distressing case without finding help in its pages. Your case called not for medicine, but for sources of peace and strength outside your own mind, and I showed you where to find them unfailingly. I gave you my own prescription, and I knew it would cure."

"Yet I confess, doctor," said his patient, "that I came very near not taking it."

"Very few are willing to try it, I find," said the physician, smiling again. "But there are many, many cases in my practice where it would work wonders if they only would take it."

This is a true story. The doctor died only a little while ago, but his prescription remains. It will do no one any harm to try it.—*Well-Spring*.



THE WOODCHUCK

THE woodchuck is so often seen sitting alone on his earthen threshold that you are apt to think of him as a solitary old bachelor, and can almost imagine him grumbling that the clover doesn't have the flavor it did in his youth. But you do occasionally see the whole family, and you may perhaps have the rare privilege of seeing the mother removing her young to a safer home than that in which they were born—carrying them just as a cat does her kittens. The young fellows sometimes betake themselves to solitary wandering when not more than one third grown, and are then apt to get into serious trouble if met by a dog or a no less terrible boy.

One day I came upon such a one, that was exploring the orchard at a foolhardy distance from the maternal burrow, toward which, on seeing me, he began to retreat. A barbarous instinct impelled me to give chase, and I soon overtook him. He threw himself upon his back, for defense, I presume; but he held up his paws in a manner so appealing that it would have softened even a boy's heart.

In some parts of New England, woodchucks are so numerous as to be a pest, burrowing the ground, trampling the clover, ravaging the bean-fields, devouring the plants, leaf and pod, and sometimes invading the vegetable-garden. Then the farmer finds it necessary to wage a

war of extermination, or at least of decimation; for the last of them seems never to be killed. And indeed I, for one, should be sorry never again to see the upright, motionless, stump-like figure, and never again to hear that piercing whistle, which seems half a chuckle of derision.

Sometimes the woodchuck has a hankering for carnivorous diet, and raids the chicken-coop; sometimes he becomes a climber, and takes to the trees for leaves.

A friend of mine in Maine, who is a close observer of wild life, tells me that in his part of the State there are more black woodchucks than brown, and that the end of their hibernation has an unvarying date. Here in Vermont the brown are more numerous; and our skunk-trappers, who have a good opportunity for observation, tell me that the time when the woodchucks come out is regulated entirely by the weather.

One to whom it is allotted to spend the whole year in this northern land, and bear the stress of the vigorous winter, almost envies this fellow, who, after enjoying the months of flowers, birds, and green leaves, creeps, at the first hint of cold weather, closer to the warm heart of the earth, and falls into a sleep that neither nipping frosts nor howling wintry blasts disturb. While the lean fox shivers in his furs as he hunts the snowy fields for his meager fare of mice, and the hare forages among the undergrowth for scant rations of browse, the woodchuck sleeps with maw ungnawed by hunger.

When, in the lengthening days, the snow begins to melt a little about the door of his house, some warmer breath of air or moistening of the earthen floor awakens him, and he comes forth into the light to look upon the barren world. Then, they say, if he sees his own shadow, he takes warning of it of more biting cold to come, and retires for another sleep of forty days. But if the sky is clouded, you may henceforth see the imprint of his feet on the softened snow, linking his own to all his neighbor's burrows; and then presently heigho, for the sprouting clover on the sunny southern slopes!—*Youth's Companion*.

AUTOGRAPHS WRITTEN IN THE DUST

MAN and the birds are understood to possess the earth during the daylight, therefore the night has become the time for the four-footed ones to be about; and in order that I might set a sleepless watch on their movements, I was careful each night, before going to bed, to sweep smooth the dust about the shanty and along the two pathways, one to the spring and one to the corral by way of the former corn-patch, still called the garden.

Each morning I went out with all the feelings of a child meeting the Christmas postman, or of a fisherman hauling in his largest net, eager to know what there was for me.

Not a morning passed without a message from the beasts. Nearly every night a skunk or two would come and gather up table scraps, prying into all sorts of forbidden places in the search. Once or twice a bobcat came. And one morning the faithful dust reported in great detail how the bobcat and the skunk had differed. There was evidence, too, that the bobcat quickly said (in bobcat, of course), "I beg pardon; I mistook you for a rabbit, but will never again make such a mistake."

More than once the sinister trail of the "hydrophoby cat" was recorded. And on one occasion the great, broad track of the king wolf of the region came right up the pathway, nearly to the door—the tracks getting closer together as he neared it. Then stopping, he had exactly

retraced his steps, and gone elsewhere about his business. Jack rabbits, coyotes, and cottontails all passed, and wrote for me a few original lines, commemorative of their visit—and all were faithfully delivered on call next morning.—*Ernest Seton Thompson*.



ONLY ONE GOSPEL OF SALVATION

(July 14, 1900)

Lesson Text.—Gal. 1: 6–10.

Memory Verse.—Acts 4: 12.

In studying this lesson, read the chapter from the beginning, so as to get the connection. Read the lesson text many times, noting the meaning of every word, phrase, and sentence. Study it till you can answer the questions in the language of the text. By following this plan each week, you will have a definite understanding of the whole epistle at the close of the lessons. And don't forget to pray for wisdom and understanding.

QUESTIONS

1. From whom were the Galatians removing? Into what had they been called? Gal. 1: 6. Who is it that calls men? 1 Cor. 1: 9. Then from whom were they departing?

2. Unto what were they removing? Gal. 1: 6. Is there any other gospel? What was the cause of their departure from the gospel? What were these troubles really doing? V. 7. In view of this, with what must this epistle of Paul especially deal? Note 1.

3. What is the gospel declared to be? Rom. 1: 16. On whom must we believe in order to be saved? Acts 16: 31; 4: 12. Then in what were the Galatians being led to trust for salvation? Note 2.

4. What solemn declaration does Paul make concerning the gospel he had preached? Would an angel from heaven be exempt from this curse? Gal. 1: 8; note 3. In what words does he repeat and emphasize this curse? V. 9.

5. What have some of the angels done? 2 Peter 2: 4. How do Satan and his followers often work to deceive? 2 Cor. 11: 13–15. How can we distinguish these false teachers from the true? Isa. 8: 20.

6. What questions does Paul ask in verse 10? What did he say in regard to pleasing men? *Id.*

7. Whom should the gospel minister always seek to please? 1 Thess. 2: 4. How should we always seek to please God? Col. 1: 10. When our ways please God, what will be our standing with men? Prov. 16: 7.

NOTES

1. Since these false teachers were perverting the gospel, this epistle must deal especially with the gospel. And what Paul then wrote has been preserved for us, that we may know what the gospel is. There is only one way of salvation—the gospel of Jesus Christ. And the Lord has made this way very plain and simple. It is the work of the enemy to make God's plan seem hard, or to lead people to add something to it that will spoil it all. Just as a little poison, mixed with good food, will cause death if eaten, so may a little error destroy all the power of the gospel in our lives. Then let us study these lessons carefully, that we may understand God's plan of salvation.

2. The Galatians were not giving up the idea of being saved. On the contrary, they were doubtless very zealous in their efforts to secure salvation. But they were being led away from God's plan; and since his way is the only way,

and his power the only power, for salvation, they must have been led to trust in some way that had in it *no* power for salvation.

3. There are fallen angels, who sometimes appear as angels of light. But we need not be deceived. By carefully studying God's word, we may know the truth so well that even an angel would not be able to deceive us. But if we neglect our Bibles, we shall be in great danger; for Satan will deceive all who do not know, love, and obey the truth.

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TIME TABLE NO. 3.

IN EFFECT SEPT. 24, 1899.

Trains Pass Battle Creek, as follows:

WEST-BOUND.

No. 21, Mail and Express	6.58 P. M.
No. 23, Accommodation	2.07 P. M.
No. 27, Local Freight	8.25 A. M.

EAST-BOUND.

No. 22, Mail and Express	8.25 A. M.
No. 24, Accommodation	1.45 P. M.
No. 28, Local Freight	5.30 P. M.

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No. 9, Mail and Express, to Chicago	12.15 P. M.
No. 1, Lehigh Express, to Chicago	9.00 A. M.
No. 3, Lehigh Valley Express, to Chicago	3.40 P. M.
No. 4, Pacific Express, to Chicago, with sleeper	1.10 A. M.
No. 75, Mixed, to South Bend	8.20 A. M.
Nos. 9 and 75, daily, except Sunday.	
Nos. 1, 3, and 5, daily.	

EAST-BOUND FROM BATTLE CREEK.

No. 8, Mail and Express, to Pt. Huron, East, and Detroit	3.45 P. M.
No. 4, Lehigh Express, to Port Huron, and East	8.37 P. M.
No. 6, Atlantic Express, to Port Huron, East, and Detroit	2.25 A. M.
No. 2, Lehigh Exp., to Saginaw, Bay City, Pt. Huron, and East	5.50 A. M.
No. 74, Mixed, to Durand (starts at Nichols)	7.15 A. M.
Nos. 8 and 74, daily, except Sunday.	
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1101 LINCOLN AVE., SAGINAW, W. S. MICH., Feb. 6, 1900.

Modern Medicine Co., Battle Creek, Mich.

GENTLEMEN: I have canvassed the greater part of the time for more than thirty years, keeping my eyes open all the time for the best-selling books and other articles that might come upon the market, but do not hesitate to say your Magic Pocket Vaporizer is the best thing I have ever found to pick up money with. It is a real money catcher, as you will see by the following. On arriving in my territory, I went directly to work. At sundown that day I had sold four and taken five orders; the second day I put in about eight hours, and had fourteen in orders and sales. I can usually average eleven orders out of fifteen exhibitions, or a profit of from four to six dollars a day. I have succeeded in putting thirteen Vaporizers in one home, receiving \$12.50 for them; eight Vaporizers in another family; five to a Baptist minister; three to another family.

Yours truly, H. S. MERCHANT.

Write at once to the MODERN MEDICINE COMPANY, 105 Washington Ave., Battle Creek, Mich., for terms and territory.



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FOR EVERY DAY OF THE WEEK

SUNDAY:

Ah, how it must grieve the Master,
That his own are so slow to praise,
In the flush of their peace and gladness,
The goodness which brims the days!
—Margaret E. Sangster.

MONDAY:

The victory that overcometh is your faith,
not in yourselves, but in the omnipotent
Son of God, whose you are, and whom
you serve.—Cuyler.

TUESDAY:

"Next to the youth who has no calling,
he is most to be pitied who toils without
heart, and is therefore forever dawdling—
loitering and lingering, instead of striking
with all his might."

WEDNESDAY:

Every word we utter, every look we give,
every attitude we take, every act we com-
mit, is being photographed on others,
molding to some extent their character,
and shaping the destiny of their souls.
—R. W. Pearce.

THURSDAY:

Seldom can a heart be lonely
If it seeks a lonelier still,—
Self-forgetting, seeking only
Empty cups of love to fill.
—Frances Ridley Havergal.

FRIDAY:

"All fine natures are generous. None are
so poor that they have not something to
give,—if not money, flowers; if not flow-
ers, kind words or crumbs to the birds,
or at least generous thoughts, which
may sometimes be the most difficult gift
of all."

SABBATH:

"I will heal their backsliding, I will love
them freely: for mine anger is turned away
from him. I will be as the dew unto Is-
rael: he shall grow as the lily, and cast
forth his roots as Lebanon." Hosea 14:
4, 5.

MORE than twelve million acres of the great Sahara desert, the larger part of whose three and one-half million square miles of territory has lain sterile for thousands of years, has lately been successfully brought under cultivation. Irrigation by means of artesian wells has apparently solved the problem of utilizing this great tract of waste land; and it is not beyond

the range of possibilities that within a few years the geographies will be out of date that define the Sahara as a "region of deserts and oases," since it may become as abundantly productive as our own Western "dry lands" in California and elsewhere.

THE "zodiacal light" is the name given by astronomers to a peculiar disk of faint light surrounding the sun. In shape it has somewhat the appearance of a gigantic egg, the base resting on the horizon, and the apex rising toward the zenith in various altitudes. It may be seen after twilight in the western heavens at certain seasons, and in the east before dawn at others. In the tropics it is often very brilliant and beautiful. The nature of this light is one of the unsolved problems of astronomy, though the opinion generally held is that it is caused by the reflection of sunlight on meteoric matter. Studies of the zodiacal light recently made in the Pacific Ocean, where the air is very clear, and for this reason well adapted to celestial observation, confirm this view.

BLESSING CARRIERS

NOTHING more tender and touching is told us of the angels than that they are "all ministering spirits, sent forth to minister." What loving thoughtfulness for his earthly children—naturally frail, often disobedient and unthankful—does this simple statement show on the part of our Heavenly Father! There are times, we know, in every experience when human comfort can not cure; when human sympathy must of necessity come short; when human friendship, sweet and precious as it is, must fail. At such times these bright messengers, whose joy it is to follow the example of Him who lived a life of perfect ministry on earth, are sent forth with messages of courage and comfort. They bring to remembrance the Love that never fails; hold up before the mind the promises of acceptance, pardon, and heirship; strengthen faith, confirm hope, and send the saddened soul forward rejoicing.

But this ministry is not for the angelic beings alone—the joy that comes from it, that attends it, may be shared by the poorest, weakest member of our Father's family. "Always, wherever we go, up or down life's ways," some one has beautifully said, "God has a blessing to send by us. No one can be too old or too poor or too plain to be God's beautiful messenger." Yet how often, alas! we travel a day's journey, and forget that we should be blessing-carriers—and fail, therefore, to be blessing-receivers.

UNION COLLEGE

AS MENTIONED last week, the managers of Union College have issued, and are now circulating, their new Year-Book for 1900 and 1901. If you are desirous of receiving a practical college education, it will pay you to examine a copy of this book, which contains all general information pertaining to the work of the institution, including courses of study, expenses, etc. The Year-Book is neatly illustrated with tinted views of the college and its surroundings, and will be sent free by addressing the president, W. T. Bland, College View, Neb.

If I were to pray for a taste which should stand me in stead under every variety of circumstances, and be a source of happiness and cheerfulness to me through life and a shield against its ills, however things might go amiss, and the world frown upon me, it would be a taste for reading.—Sir John Herschel.



One Year's Fire Losses.—During the year 1899 the losses by fire, in the United States, aggregated the enormous sum of \$153,597,830. This is the largest fire loss on record for any year in the history of the country, except that of 1871, the year of the great Chicago fire, and of 1893, when large fire losses followed the financial panic. Yet of all nations, the United States is the best prepared to fight fires.

A Mammoth Battery.—In the Jefferson Physical Laboratory of Harvard University, the director, Professor Trowbridge, has in successful operation a storage-battery of twenty thousand cells. This is said to be the largest storage-battery in the world at the service of the investigator in electricity. At a voltage of three million, sparks can be produced six and one-half feet long, exhibiting all the chief peculiarities of lightning. Professor Trowbridge says that he could obtain six million volts; but the battery would require an open field, and the apparatus would have to be thirty feet from the ground.

The Increase of Crime.—Mr. Drahts, chaplain of the San Quentin, Cal., prison, has collected statistics of the population of the United States and the number of crimes committed. These statistics show that during the last five decades there has been an increase of crime in the ratio, per million of population, from 290 to 1,315. However, it is stated that "while the growth of crime exceeds in proportion that of population, this is true only of the minor grades of crimes." These facts are sufficient to prove that crimes do not by any means decrease where mere intellectuality, unaccompanied by religion, has even greatly increased.

Origin of the Word "Penknife."—Until the year 1820 pens were made of the quills of geese and other birds. These pens, being soft, soon split and wore out, and new ones had to be made very often. Most writers in those days kept a small, sharp knife to make these quill pens; and these knives soon came to be called "penknives." The word "pen" is derived from the Latin word *penna*, meaning "a feather;" thus when we speak of a steel pen, we are literally speaking of a steel feather. It is said that one English firm alone makes two hundred million pens annually, and that a like number are also made in the United States each year.

"Setting the River on Fire."—"In old English times, when each family was obliged to sift its own flour," says the *Ladies' Home Journal*, "it sometimes happened that an energetic man would turn his sieve so rapidly as to cause it to catch fire. The style of sieve used in those days was called a 'temse,' and it became a customary saying that a lazy man would never set the temse on fire. Now it happens that the name of the River Thames is pronounced like the name of this old flour-sieve; and, after many years, when the old-fashioned temse was forgotten, it was thought that setting the temse on fire meant setting the river on fire; and that is why to-day we say that a stupid person will never set the river on fire."

A. J. BOURDEAU.