LISTERINE

The original antiseptic compound
Awarded Gold Medal (Highest Award) Lewis & Clark Centennial Exposition, Portland, 1905; Awarded Gold Medal (Highest Award) Louisiana Purchase Exposition, St. Louis, 1904; Awarded Bronze Medal (Highest Award) Exposition Universelle de 1900, Paris.

The manufacturers of Listerine are proud of Listerine—because, it has proved one of the most successful formulae of modern pharmacy.

This measure of success has been largely due to the happy thought of securing a two-fold antiseptic effect in the one preparation, i.e., the antiseptic effect of the ozoniferous oils and ethers, and that of the mild, non-irritating boric acid radical of Listerine.

Pharmacal elegance, strict uniformity in constituents and methods of manufacture, together with a certain superiority in production of the most important volatile components, enable Listerine to easily excel all that legion of preparations said to be "something like Listerine", including the Liquor Antisepticus Compositus of the U. S. Pharmacopoeia, which is generally recognized as an undeclared tribute to Listerine.

The success of Listerine is based upon merit
The best advertisement of Listerine is—Listerine

Lambert Pharmacal Company
St. Louis, U. S. A.

Tell Them
or the LIFE STORY
OF A
MEDICAL MISSIONARY
(An Autobiography)

By Geo. D. Dowkontt, M D.
250 PAGES. 30 CHAPTERS.
23 ILLUSTRATIONS

Price, Stiff Covers, 35 cents, Postpaid
"A truly marvelous story from real life."
"As wonderful as the life of George Muller."
"None can read the book without having their hearts stirred and their faith increased."

By the same Author
"Murdered Millions versus Medical Missions"
"A wonderful revelation and soul stirring volume."
96 pages. Price 15 cents, Postpaid
Both books and The Medical Missionary (monthly) two years for one dollar. Address,

Medical Missionary
Battle Creek, Mich.
With the close of another year we naturally feel inclined to stop and "view the landscape o'er."

We seem to stand on a hilltop, and, looking retrospectively over the road we have traveled and prospectively over the way that lies before us, we find that we have much to be thankful for in the past. Things might have been worse, although we perhaps feel that some things were indeed hard to bear or understand; yet, with it all, we can not but say with one of old, "Ebenezer as to the past, and Jehovah-jireh as applied to the future; remembering that Jesus Christ is the same, yesterday, to-day, and forever."

Viewing the year now closing upon us as applied to the special cause for which this journal stands—medical missions—we feel that we have much cause for gratitude and encouragement, especially when we consider these facts: First, there never were as many medical missionaries in the world as now, viz., eight hundred and fifty; second, there never were as many preparing to become medical missionaries as now; and third, there never have been such advantages for the education and training of medical missionaries as are now provided by the American Medical Missionary College.

As to the need for this agency, and its immense value as a means of reaching sin-sick souls through suffering bodies, and leading them to Christ, there can be no question. The terrible condition of millions who are perishing, body and soul, for lack of the knowledge Christians possess and ought to give them, is simply appalling; while the marvelous openings gained by this agency to hearts and homes and people otherwise inaccessible to all religious effort, and the results of such combined agency, may be learned through the pages of this journal and many others. All considered, we look both ways—and thank God for the past and trust him for the future.

With this issue a table of contents for the year (including only the monthly numbers) is issued for the convenience of our readers, many of whom will no doubt desire to preserve their copies by having them bound.

As one glances over the titles of articles, the importance of and call for the medical mission agency are very apparent, revealing also the heroic devotion of our noble band of medical missionaries laboring in all lands; and we can only say and pray, "God bless them each and all and increase their number, that more help may come to the helpless and suffering."
EDITORIAL

It is well for us to note, and not ignore, what others are doing. During the past month—November—the first General Missionary Council of the Roman Catholic Church in America was held in Chicago. The gathering lasted over three days, and was attended by hundreds of delegates from the United States and Canada. Earnest addresses and appeals were made to men to cease living only for themselves and to think of others, the heathen and needy both at home and abroad, and hearty responses were made and some hundreds and thousands of dollars raised.

An incident which occurred some fifty years ago in India is recalled: It was in 1857, and General Havelock had been hastily summoned to go with his body of troops to the relief of Lucknow. At the end of a hurried day’s march he discovered that he had no chaplain among his troops, and telegraphed back to the officer in charge of the garrison he had left, to send one on. The reply came, "Only one available, and he is a papist." In the bigness of his heart, he replied, "Never mind, send him on," and upon his arrival, the general was there to meet him. After some minutes’ conversation they discovered that the telegraph operator had blundered by using the word "papist" instead of "baptist." They soon became close friends, the general himself being a Baptist, and for many years the Rev. Gelson Gregson and the general worked earnestly together for the good of their soldiers.

In later years Dr. Gregson and the writer labored together in Christian temperance work in the British army and navy, and in 1871, with a few others, founded the "Royal Naval Temperance Society," now numbering many thousands in its membership, under the leadership of Miss Weston of England.

One of the most pathetic stories ever written is contained in the article, "The Grave on the Hillside." As one reads of the grief, truly agonizing in character, of the father mourning over the child whom he had tried to cure but had killed instead in his ignorance, one is led to ask how many thousands are thus sacrificed yearly, and how long will it be before the Christian church sends them help and teaches them better.

As one reads too of sixty-four children in one of our Christian schools in China, and no doctor near to care for them, except the missionary, who in her despair says, "We, who have never had one hour’s medical training are responsible for these." Yes, and for themselves—the missionaries—also; for if there is no medical aid for the one there is none for the other. No mission school or station should be established without a doctor near at hand. It is not only unwise, but it seems cruel to send missionaries anywhere without some medical provision.

"An African Cripple" is the title of an interesting article on another page written by Mrs. Thompson, wife of Dr. W. L. Thompson, one of the students of the I. M. M. Society in New York twenty years ago. The Doctor and his good wife are laboring together in South Eastern Africa.

"In the Wake of the Doctor," is another article of interest, showing how the loving sympathy and medical skill of a devoted woman won the hearts of many of her patients to Christ.

In the article telling of the touring made by Dr. Dunlap in Siam, mention is made of Dr. Bulkley, a young physician who accompanied Dr. Dunlap. We are especially pleased to hear of this young doctor, whom we have known personally for years, and whose father, Dr. Duncan Bulkley, is the well-known dermatologist of New York. With all the inducements of a great city and possible future fame and fortune, our young brother preferred to go out to help suffering humanity in a heathen land. A noble like-minded sister of the doctor’s prepared herself to go out to do similar work by taking a full course in medicine, but so far she has been hindered from doing so by circumstances beyond her control.

It is pleasant to know that the parents of these devoted young people are in full sympathy with them, which is not
always the case with those who offer for mission service.

The article by Dr. Swart, who is also laboring in Siam, will be read with interest under the caption, “The Work of Healing Souls.”

About twenty-five years ago a young man presented himself to the writer, then residing in New York, bearing an introduction from the Rev. Charles H. Spurgeon. The young man's name was Charles Sherard Leach, and Mr. Spurgeon's commendation of him ended with a sentence of three monosyllables, “He will do.” In the year 1888, the writer, when conversing in London with Mr. Spurgeon, said to him, “You wrote of Leach—‘He will do.’” I have to report, “‘He has done’—and ‘‘He is doing.’” It was a little pleasantry between friends, but we did not then think that our devoted brother, Dr. Leach, laboring in Algiers, North Africa, would so soon after meet a terrible death.

He had been laboring very successfully in Algiers and had won the hearts of many to Christ, when he was deputed to open up a new station at a place called Sfax. He had been there but a few days when he was found murdered, together with his wife and young son—a baby girl in its cradle being overlooked by the murderers. Some one in England took charge of the little one.

An article on another page is from Dr. Leach's successor, Dr. Churcher, who tells of his laboring under difficulties, and yet meeting with success. We recall how, a few years since, our devoted brother, Dr. Churcher, nearly lost his eyesight, and narrowly escaped with his life as the result of an explosion.

It is pleasant to know that he is as busy as ever at the good work, especially among the Arabs. May he be long spared to continue his noble efforts, aided by his devoted wife.

We are much indebted to the Editor of Life and Light, one of the best woman's magazines, for loan of cuts of the hospital at Marsovan, and that of ‘A Street in Bombay,’ also for some of the material reprinted from its pages in the present issue.

A MID-WINTER MEDICAL MISSIONARY CONFERENCE

As Battle Creek has become such a mission center for the training of medical missionaries in the American Medical Missionary College, and the care and treatment of all missionaries in the Sanitarium, it is proposed to hold a yearly conference upon Medical Missions in January of each year, lasting three days, or longer, and conducted upon lines similar to the General Missionary Conference held in June, at Clifton Springs.

The first gathering of the kind is to be held on January 19th, 20th, and 21st, 1909. It is hoped that Bishop Thoburn of India, whose devoted wife was a medical missionary, Dr. R. H. Nassau, nearly fifty years in Africa, and Dr. W. Grenfell of Labrador, and others, will be present.

All medical missionaries are especially invited to attend, but all missionaries will be equally welcome.

During the entire week of the conference free entertainment will be provided for all Evangelical missionaries.

Those wishing to come sooner, or to stay longer, can do so at the ordinary reduced rate for missionaries, viz., five dollars a week, including medical treatment and operations.

Those likely to attend should correspond with Dr. G. D. Dowkontt, Secretary of the Conference, at Battle Creek, Mich., U. S. A.

Children of missionaries will, in future, be granted scholarships in the American Medical Missionary College by which the tuition fees of fifty dollars a year will be paid for them, with the distinct understanding that their purpose is to enter the mission field.

Three children of missionaries are now in the Freshman class of the A. M. M. College, and already three others have applied to come next year.
One of the finest gatherings yet held at the Battle Creek Sanitarium took place on November 29th when representatives from nine foreign mission fields were present, viz., India, Africa, China, Japan, Egypt, Turkey, Siam, Assam, and Chile.

Four medical missionaries addressed the gathering. Dr. Winifred Heston of India, Dr. A. F. Grant, of Egypt, Dr. Emily D. Smith, of China, and Dr. R. S. Hambleton of Turkey. The veteran, Dr. J. B. Hartwell, representing the entire body of missionaries, presented a beautifully engrossed copy of the testimonial which was printed in our last issue.

His address, and that of the other speakers, will be given in the January number; meanwhile it may be well to mention the other speakers.

Rev. Benjamin Chapell of Japan, Mrs. Royal J. Dye of the Congo, Miss Edith M. Buck of Siam, and Miss Anna S. Long of Assam.

Quite opportunely, there was present, Mrs. James L. Phillips, whose husband was for so many years medical missionary in India, and who was so well known for his Sunday School work.

Although her hair is quite white with advancing years, she like Mrs. Moses Parmelee, another medical missionary’s widow, is quite agile and active, and retains her deep interest in missions.

Mr. Clayton S. Cooper, College Secretary for Bible Study in connection with the International, Y. M. C. A. movement of New York, is at present convalescing after an operation for appendicitis. He was much interested in the gathering especially in view of the fact that he is shortly to sail on a world-wide tour in behalf of Bible study in the colleges of other countries, including India, China, Japan and the Philippines.

There seems to be a spirit of revival in regard to study of the Bible among the young men and women in our colleges, and many thousands are devoting themselves to this subject. The plan seems to be to organize small groups of men or women, numbering from six to ten members, under the title of Bible Study Groups, in our various schools and colleges, the students selecting their leaders from among themselves.

Mr. Cooper recently met the young men medical missionary students, and on another occasion the young women, and five or six Bible Study Groups” have been formed as the result.

It is doubtless a wise and very necessary movement, and will have its advantages in being under the management of the students themselves.

A FAITHFUL NURSE

Miss Lillian F. Cole, a nurse in the hospital at Sivas, takes deep interest in the spiritual welfare of her patients, as well as in the cure of the bodily ills. She says:

‘One of our patients was the dearest little Circassian boy of fourteen. He had a very serious operation, a malignant tumor on his arm, and his life just hung by a thread for some days, but God was good to us and spared his life. I have never met a boy in this country just like him; he was like one of our nice American boys. He was so interested in the Bible, and as soon as he was able to read for himself he would read by the hour. He said so many times, ‘What a wonderful book it is.’

His father when he came to see him would sit by his side and read it, and he told me his father had said to him that he wished they had such a book. I gave him one to keep one day, and you never saw a happier boy; he said over and over again, ‘Sister, is this lovely book for me really?’ I told him that it was, and I said, ‘Abdul, will you read it every day?’ He said, ‘Yes, indeed I will.’ He is the son of wealthy, influential people and they expect to send him to study in Constantinople and to live with an uncle who is a pasha there; and so you see what an influence he can have if he learns to love the word of God. I am praying that he will not have a return of that dreadful disease. So many of our patients have been interested in the Bible, and we have had so many more Islams than usual. I am always glad of this, because it is my language, and not many of the Armenian women know Turkish, and if they do it is only a little.
MISSIONARY DEPARTMENT

SFAK MEDICAL MISSION, NORTH AFRICA

The year which has passed will be memorable as the year of the trial. With much fear lest all our work was about to be stopped, we stood before the French judge at Sfax. But much prayer had been offered by our friends, and we felt that it was only the fulfilment of the promise that "ye shall be brought before...rulers for My Name's sake." Some of my bottles of medicine were upon the judge's bench—the "con- permission to practice my profession, but I must not say one word about religion, or he would withdraw his permission there and then. I laid his permission on the table, and reminded him that my only reason for being in the country was that I was a missionary; and then I enjoyed a unique opportunity of giving him the Gospel message, and telling how I preached it to the Arabs. Great was my relief when, uttering an exclamation, he tossed the permission back to me and wished me "Good day.

PRAYER HAD BEEN ANSWERED

and the door of the medical mission was still enclosed.

A week later we had opened a dispensary in a village a few miles in the country, but finding that difficulties followed us there, we did not try to work, but made the best of our opportunities in our old quarters, sending all our patients for their medicines to an Italian chemist established in the town. This arrangement is neither economical nor satisfactory, but it was a case of this or nothing; and that it has not prevented us from reaching the people is proved by the 2,743 consultations we have had since.
It may be of interest to say a few words about the patients on a single morning! At the lower left-hand corner is a man with a smiling face; he was brought to us strapped across a camel like a bale of goods, the said camel having bitten his forearm so badly that he had broken both the bones and torn the tendons with his teeth. This man stayed with us about three months; as he got better his prejudices seemed to grow less, and the Gospel message given daily seemed to reach further than his ears. Yet, when we questioned him, his response would be a smile and such a remark as: "Well, you see, we are only animals, and understand nothing."

The next two, one with his face quite hidden, were brothers—penniless, homeless, friendless, and ailing. They stayed with us till cured; in fact, so pleased were they with our treatment that it was very difficult for them to say "Goodbye," and we are not without hope that the good seed of the Gospel may have found a lodgment in their hearts.

Above the brothers, in the next row, are two more in-patients. The one with a swollen face was acutely ill with inflamed kidneys and consequent dropsy, from which he made one of those rapid and complete recoveries which make our reputation with the Arabs.

The boy in front has been regularly to Mrs. Churcher's Sunday-school Class, where the singing is wonderful—for noise if for naught else.

The man next to the boy, wearing a dark green turban, interested me much, as he claimed to be descended from the prophet himself. He was sadly diseased, and very anxious about his health. He prayed for healing in the consulting room, in the name of Jesus, and removed his turban while he did so.

This for a "sheriff,"—a direct descendant from Mahomet,—was remarkable. I lost sight of him after this, and know not whether he was true or false in his profession of interest and faith.

The writing upon the outside wall of the Medical Mission of John 3:16, took time and effort to accomplish, and will be remembered for the fact that, at one time, it seemed as if some evil power were at work, in the fierce wind which blew, as if to throw down both ladder and missionary. As this text is visible from several roads, and to considerable distance, we may hope that it will serve as a waymark for wanderers.

**SPAX MEDICAL MISSION ACCOUNT**

The Lord commands his followers to "lay up treasure in Heaven;" yet how many of us have scarcely remembered our Heavenly Saving Bank Account! Yet, as surely as the "prayers and alms" of Cornelius went up for a memorial before God, what we do for his sake, even to help poor Moslems in North Africa, will not be forgotten by him.

The country market continues to afford us one of our best opportunities of reaching many otherwise untouched by any Christian influence. See them and their tents and animals gathered from the whole countryside. How busy they are buying and selling! Yet the word quickly goes round amongst them, "The Doctor from Sfax has come, and all sorts of medicines, for sore eyes and heads and everything else can be had for nothing." Ah, here they come!

"COMING, COMING, YES, THEY ARE" Quickly the room is filled, and the Gospel of the Grace of God is proclaimed as simply and clearly as possible. Gospels and medicines are given away as they leave, and a new crowd of needy ones presses in. Thus the good seed is sown, and the harvest will be by-and-by.

**WHAT TWO CENTS A WEEK WOULD DO**

Do you realize that if the members of the church of Christ were to give one postage-stamp a week to this work, it would amount to twenty million dollars a year! That if they gave the equivalent of a car-fare a week, it would mean fifty millions a year; and if they gave the equivalent of a dish of ice-cream a week, it would be a hundred million dollars a year? If they gave the equivalent of one hour's unskilled labor a week to the evangelization of the non-Christian world, it would be one hundred we are asking for only forty million dollars. It ought to seem possible!

—J. Campbell White
One of the finest educational institutions in the world, at least in a non-Christian land, is the college at Beirut, established at considerable expense of not only money, but time and wise effort.

Founded by the Rev. Dr. Bliss, whose son, Rev. Howard Bliss, is now the honored President and successor to his father, it has had a number of devoted and heroic men connected with it who have sought, very wisely too, to educate the natives of Syria and adjacent countries in various lines including theology and medicine. Many of its students are to be found doing noble service for their fellow countrymen.

The education of persons in their own countries has many advantages besides the financial one, and it is well that such institutions exist.

The names of the Rev. Dr. VanDyck, and of the famous surgeon, Dr. George E. Post, son of an illustrious father, Dr. Alfred C. Post of New York, and now being honored by a son in Cesarea, also a medical missionary. These names, with that of the Rev. D. Stuart Dodge will always be associated in the mind as benefactors, with others, of this noble institution.

We must not forget in our joy of the Christian life that there are others who have none of this joy; our mission is to carry the news, and to rejoice as we go on our way.—J. R. Miller.

"Forget your own grievances. Try to find and to understand the joy of serving others. You have been listening to yourself long enough. Lend your ear and thought to another."
THE GRAVE ON THE HILLSIDE

BY MISS HARRIET L. OSBORNE

Near one of our compounds is a new grave. It is just outside the wall, and seems to lie close to it for shelter. It is such a little grave, only three or four feet long, and such a sad little grave, for the soil is stony and hard, and only weeds and rank grass grow about it, and no sweet, tender flowers. A few months ago, on a bright, warm, sunny day, when the world was just running mad with fun and frolic and everything was reveling in joy, this grave was made.

Some happy little duck herders were playing about the great rocks on this hillside when one of them looked up and saw a curious procession coming toward them. "See! this what a man comes to bury," he said, and leaving their sport the three sat down to watch the approaching line. It was a pathetic little line, only

A ROUGH BOARD COFFIN SWINGING

from a stout bamboo pole across the shoulders of two men, and a sad, bowed man following wearily behind. "Why not blow horns or bring the paper rooster to lead the spirit home?" said one. "Very poor they are; it is the Jesus doctrine man," said another. "I heard men to-day say little sister had taken sickness. Perhaps she has passed beyond." And they went closer to see.

And they saw the bearers come to a hole close to the wall at the top of the hill, and when the men attempted to lower the box, small as it was, they saw the hole was quite too short. And they saw the old man sit down on a stone and bury his face in his hands, while the two rough men, silent and subdued for once, went away for iron picks to dig in the earth and make the hole larger. They watched until all was done, and the coffin was covered out of sight by the rough clods of red earth, and the old man still sat and did not move. Then they realized that the sun was down, the glad, bright day was over, and in its place was dark and cloud and chill, and they hurried away home.

So the night found the old man alone with grief and the cheerless grave of his little girl. But why this despair, if he is indeed the Jesus doctrine man and believes in God? Because by his own hand, though that hand was guided by ignorance, the father had taken his little one's life. Had he known! had he but known! Over and over the events of that awful day the stricken man goes, until the poor brain is in a whirl, and he is well-nigh crazed with grief.

Early that morning the little daughter, Bright Jewel, had complained of bowel trouble and pain. Simple remedies were given, but without effect. She could eat no breakfast, and the pain increased. What was to be done?

THERE WAS NO PHYSICIAN THERE TO CALL.

To take the child on the launch to Foochow seemed an impossible thing, and surely she would be better soon. As her cries increased the father thought of the bottle of medicine bought last year at Foochow for the same sickness, and climbing up on a chair he found it on the top shelf of the closet. "But," the mother had said, "It has not it former look." "Truly, mother," the father had replied, "it must be the one pattern. No man has put a hand to it. It cured me well." And so the medicine was given, one spoonful and another and another, in hopes that Bright Jewel soon would be rid of the distress.

But not so. Instead of improving the child grew steadily worse. And now an awful thirst seemed to burn and scorch her, until the mother, in despair, cried:

HOW SHALL WE DO? CAN NO MAN HELP?

"Once again try the medicine, and if it does not now benefit, the bottle shall be thrown away. Truly it is black. I remember not this blackness. I will give her no more." But, indeed, there was no need of medicine now. Bright Jewel was beyond the help of man. Too late the father knew that as the medicine evaporated the wicked opium had been left strong and deadly, and that every drop had poisoned the delicate body and consumed the precious life. The fond father, with all loving attention, had done his best. This had proved his worst. But he did not know, and there was no one there to tell him. Think you the shadow of this sorrow will ever be lifted from that home?

As we see the stony grave on the hillside, the white face of the man as he
passes, and know that broken health has forced the mother to give up her important work as Bible teacher, our hearts are heavy with sympathy, and, too, with an awful dread.

And why this dread?

Because a similar tragedy may occur at any time under our own roof. Sixty-four Chinese are with us at the Abbie B. Child School. For the lives of these sixty-four we are directly responsible. We, too, who never in our lives have had one hour’s medical training. Fifteen Bible women and as many classes of women who are learning to read the Bible are within easy reach in the district. For these there is no physician nearer than Foochow. But these make only a small fraction of the whole. To thousands and thousands of men, women and children outside trained medical skill never reaches out its hand of healing.

One of our missionaries, after twenty-three years of ministering to the sick, said to-day: “If I had a young sister with medical training at home, no matter how attractive might be her opening there, I’d urge her to come.”—From Mission Studies.

SIAMESE GRATITUDE AND SYMPATHY

The High Commissioner of Puket one day said to a friend, as he placed his hand on the shoulder of Dr. Dunlap, “That man saved my life,” and then gave proof of his gratitude and of his sympathy for other sufferers, when he offered five thousand dollars for a mission hospital to be built at one place, and further promised three thousand dollars more if one should be established at another place.

From the Vaccine Laboratory of the Cheng mai Hospital lymph was supplied and vaccinate many thousands of children, and a corps of trained medical evangelists, the above group, went forth to do noble service in behalf of their fellow countrymen and especially among the children.

In this way no doubt not only much suffering is prevented and thousands of lives saved, but an object lesson presented of living Christianity bringing forth such fruits as are narrated above. If we plant the roots we will reap the fruits.
That we may get some idea of the land, people, and the conditions that prevail, which determine to some extent the opportunities of the Gospel, I beg leave to submit the impression made upon us, after a careful, though not exhaustive, study of them, as found on our recent trip to the interesting island.

Mindanao is the second largest island of the Philippine Archipelago—by some it is said to be the largest. Judging from the manner in which the map of this island is constantly being changed, one might expect any time to hear that it is the largest, and we shall not be surprised to hear, also, that it holds the richest treasure to be found in the entire archipelago. A very fine grade of coffee, cacao, hemp, and copra are grown; some gold and coal are found in the interior, and the rich pearl fisheries at Zamboanga in the Southern part, make a variety of productions, with great possibilities, but which at present are just beginning to be developed by American enterprise.

That such resources should have been buried, and such a large and fertile island as Mindanao should have remained undeveloped for so many years of Spanish occupation, seems almost incredible. That so much has been done in the development of the country’s resources, the pacification of the inhabitants, and the education of the young, in the short time of American occupation, makes one proud of his country and countrymen.

After waiting several days in Iloilo for a transport for Mindanao, we were told by the chief quartermaster that our prospects for a passage were not favorable, and the opportunity presenting, we engaged passage as far as Cebu on a large Hong-Kong vessel. At Cebu we embarked on a small steamer loaded with cement, headed for a small barrio some distance from Cagayan, the town we had planned to make our projective point. We expected upon our arrival to find Antonio Cosin, the young man whom Dr. Thomas had found at Cagayan two years ago, and had trained as an assistant in his medical work. But he had planned to go to Manila in a few days, and was therefore unable to help us. We were not a little disappointed, for we had depended upon him to interpret for us. Our limited knowledge of Visayan was soon exhausted, for the Cebuano is somewhat different from the Panayan Visayan. We were in need of an interpreter, and to find one who was in sympathy with our work was a task which we were unable to accomplish. We were very fortunate upon our arrival at Cagayan to be entertained in the home of the treasurer of Misamis Province, formerly of Bacolod, from whom we gained considerable information about the people and conditions. The school teachers also gave us much information, one of whom accompanied us on a trip to the mountains, walking more than forty-five miles.

The people in Misamis Province are divided into two distinct classes. The province has recently been divided because of this fact; that portion along the coast line remaining the Province of Misamis, the interior becoming the Province of Bukidnon, and presided over by an American governor, whose headquarters are at Mallabalay, some sixty-five miles from Cagayan. We were planning a trip to this interesting center, but we were prevented by the rains and lack of time. We spent two days, however, visiting the barrios of these interesting mountain people. We regretted exceedingly that our time was limited.

These mountain people appealed to us very strongly as being ready for the Gospel. One finds them uncontaminated by the traditions and customs of their brethren by the sea. The Spanish friars, with very few exceptions, have not gone among them. They are designated as unChristian, and yet the word “Christian” among them has come to mean all the viciousness of their Catholic brothers, who live in the towns along the coast.

It is truly an unfortunate circumstance, that all the extortion, thievery, gambling, tuba-drinking, etc., should have been associated with that word. These simple people tell you they do not want anything to do with the “Christian
dagatnons"—(people who live by the sea). We are told it would be necessary to drop the word “Christian” and substitute “evangelical” if we expected to reach them.

**They are extremely friendly**

to Americans, and are very anxious for schools. The American governor is almost idolized by them, and they live from month to month upon his visits to their newly established barrios. He is not known by name, but they speak of him as “friend.” They carry out his proclamations with the greatest care. Recently an order was sent out that they form small villages to facilitate the education of their children. It is indeed an interesting sight to visit these villages, and see the eagerness with which they look forward to the coming of the school teacher. In one place, we told them that our accompanying friend was also a teacher, and was very anxious to teach them, and live among them.

**They were greatly pleased,**

and leading us to the edge of a hill, pointed down to a new house, which they said they had built in anticipation of his coming. This greatly moved our friend, who said he would, upon his return, request the superintendent to transfer him to this district. I have no doubt at all that if these people were instructed in the Gospel, they would as readily build a chapel, in anticipation of the coming of an under shepherd, who would lead them to know their Saviour and the true way to live. Our hearts longed for them this opportunity, and we fell to wondering how long Christian (in a truer sense than these poor people understand it) America would make them wait for its consummation.

We found conditions in the coast towns very much as Dr. Thomas described them after his more extended trip two years ago. At Cagayan, however, a very decided change has occurred. The people are much dissatisfied, and have become **decidedly anti-American.**

In former days the coast people lived in ease upon the Montescoes, or mountain people. Many of the former lived in very fine houses, furnished with pianos and luxuries, and were able to send their children away to school, until the American government divided the province, as above described, for the protection of the simple mountain people. The town people purchased the produce from the country people at the lowest possible prices, and shipped it to Manila, Cebu, and Iloilo, where their purchase price was doubled and trebled; the poor Montesco receiving none of the benefits. The government is seeking to regulate this affair;

**Helping the poor man**
to know his rights and how to demand them when necessary. Of course this irritates the upper class, whose source of graft is cut off. The Montescoes present the more desirable class to work among, so far as immediate results and teachableness are concerned. We are told that the mountain tauco makes quite a good laborer when given the proper opportunity and treatment. The lot of the poor in the towns along the coast is certainly an unenviable one, for they have no other occupation than to find sufficient food for each day, and I might say no other ambition.

**They will not work**
even to supply the needs of their ill-clad and half-starved bodies. The government has the greatest difficulty in securing sufficient men to carry on the work of building roads. We tried to hire men to take us from one town to another in their small boat, but were unsuccessful because the men had caught sufficient fish for their evening meal. Herein, perhaps, lies the secret of their indolent indifference. Nature is too kind—the sea is full of fish, the land fertile, and native vegetables and fruits grow in abundance without cultivation. Rome has not created demands for better living nor given them **a single desirable trait.**

How could she, with the definite policy of keeping the people in a state of “innocent ignorance,” and “not encouraging acquaintance with the outside world,” “Ignorant” indeed they are—but not “innocent” of the vices of
immorality, gambling and drinking, which the Catholic church has seemed to have no power to correct, if indeed it has made the effort. This is true to some extent all over the islands, but for some reason, especially true there, both among the Aglipayanos and the Romanists. Such a religious system needs renovation better, extirpation—especially in its be better, extirpation—especially in its present unlovely form. Nothing can do it, however.

BUT THE POWER OF GOD

in the hearts of men, awakening a people whose consciences have been put to sleep and well-nigh killed by the domination and tyranny of an unvitalized form of Christianity.

OPPORTUNITY FOR THE GOSPEL.

The coast towns from Surigao to Balingao, including in this sweep the Macajalar and Ilagan Bays, are, together with the whole of the interior of Bukidnon Province, considered Baptist territory, and yet we have not done sufficient work to justify our holding it. Yet since no one else has done more, and we claim it, we are holding it until such time as our mission is sufficiently reinforced by men and money to add our little to its evangelization. “Our little” it will be, for one missionary family can only hope to cover a very limited space; for if more is attempted, the effort will be spread so thin, the visible results will be difficult to find. The question is how soon the friends at home will make it possible for the Missionary Union to give us the family for this territory.

—H. H. Steinmetz, M. D.

IN THE WAKE OF THE DOCTOR

BY MRS. JAMES SMITH, OF BOMBAY

I HAVE just returned from a four weeks’ holiday—the first since the hot season a year ago, as we did not go away at Christmas—and have begun my work again among the heathen women. These are nearly all Dr. Gurubai Karmarkar’s patients, and it is a real privilege to work for them. Dr. Gurubai’s name is a household word in this part of Bombay, and she has many patients in other parts of the city as well. Her work for the sick brings hope and joy to many homes and opens the way for Christian teaching. It is so much easier for people to believe in our message when they have experienced its practical results as shown by Dr. Gurubai’s loving service. My first call was on Sonubai, a Mahatta woman, a former patient who has, since I first met her eight months ago, always given me a cordial welcome. She lost her three children, and needs help and comfort. She seems to be deeply interested in the Bible stories and teachings, and often calls in a neighbor to hear the lessons for the day. Her little maid-of-all-work comes in, too, and I have spent many happy hours in this home, where there is such a hearty response to the message of God’s love. Her first word is a warm welcome as she takes my hand, and leads me in with homelike hospitality that is rare

in this caste-ridden land, and, as I leave, the last word is, “When will you come again?”

My next visit was to a little girl-wife commended to me by a missionary friend in Poona, in whose school she had been taught. There is an older wife, who calls her “Sister,” and seems a gentle, kind woman, but Bubbibai speaks of her home in Poona with wistful longing. She seems very homesick, and there were unshed tears in her eyes on my last two visits. I am afraid she is unhappy. But they allow me to visit her freely, and I hope the other women will soon be as much interested in the Bible lessons as she is.

From here I went to a chawl (apartment house), where two Brahmin women, patients of Dr. Gurubai, have
their homes. There are two children—a boy and a girl—very sweet and attractive. Gangutai answered my knock, and I saw at a glance that she was serving her husband’s dinner, though it was long past the usual time. I had other calls to make and said that I would come again, but she would not hear of this, and her husband called out from within saying that he had just finished, and that I must not go away. So I was ushered into their sitting-room beyond, through the room where he sat at dinner—

A MOST UNUSUAL PROCEEDING, for which I felt constrained to apologize. I stayed only long enough to see the children, as one of them was ailing and fretful and needed his mother, but went away feeling that it was not in vain, as they were both so cordial—the husband, though he still sat at dinner, stopping to join his wife’s urgent invitation for me to come as often as I could. This is a unique experience. I have never before been invited to enter a Brahmin’s dining-room at meal-time.

My next call was the first meeting with another Brahmin woman of whom Dr. Gurubai had told me. It was another attractive little home and I met a hearty welcome. After a little talk of what Dr. Gurubai had done for her, of her home and her husband, I found that she could read, and offered to bring her some simple stories which she seemed pleased to accept. These first visits usually open the way for Christian teaching, and this seems a very promising home.

When I rose to take leave, Sunderab insisted on my having tea, and promised not to keep me long, as I had another appointment. She brought in her little brass stove and her tiny kettle, and in five minutes gave me a very nice cup of tea. Tea, by the way, as usually made here—boiled with sugar and spices into a syrup—is often a bit of an ordeal. I have never learned to like it, but am glad to take it as a step in the pleasant process of getting acquainted.

On another day recently I visited a Marathi family, taking one of the suburban trains, as it was far out, only to find the younger women away for a holiday visit. The head of the house was at home, and, after a friendly
greeting, he told me that his mother-in-law was at home, and would be glad to see me. She came in presently and, after greetings and inquiries after the family, I read to her the story of the woman of Sychar. She seemed to take in the spiritual truths of the lesson, and after we had talked for some time and sung some hymns, and I was about to leave, she asked for some mangoes to be brought, and, after cutting them up nicely, she gave me some and ate some herself. There was a young man about the house who seemed to belong to the family, and I inquired after he had gone out who he was, as he seemed to be deeply interested in the lesson as we talked over it. She said he was a servant of the family, and added, “But he is one of us; when we have a faithful servant WE TREAT HIM AS ONE OF THE FAMILY.”

He came in just then and she offered him some of the fruit—a second unique experience in one week. In all the years that I have gone in and out of homes in India no one has ever sat down to eat with me, though I have often received fruit or cooked food, and when the poor boy sat down to eat with us it was truly a strange experience, and I felt that the bonds of caste and class were loosening.

These are but a few of Dr. Gurubai’s patients; there are many other homes where her

LOVING SERVICE OPENS THE DOORS

and the hearts of the women to gospel teaching. Since last November I have given my whole time to this work, with the exception of such help as I have been able to give Mr. Smith in the singing at his evening meetings for students, and I hope to do more still as the work grows. The work of the Bible women was closed a year and a half ago. I have only one Bible woman just now. She is advanced in years, but active for her age, and a very impressive speaker. She has access to a large number of respectable homes, and also does a good work among the very poor, whose homes are squalid and wretched. I have taken several rounds with her, and am planning another this week. She has great ability, and presents the truth in a very attractive and forcible way, always getting a good hearing and a hearty response. Being advanced in years, she speaks to all in the house—to men if any happen to be present, though her work is for women—and all listen respectfully. She is much in earnest. We have not nearly as many trained Bible women as we need.

A STRANGE BELIEF IN THE NEW HEBRIDES

A CURIOUS belief in a kind of sorcery called “netik” is responsible for much of the bloodshed on Tanna. Certain stones possessed by their sacred men are believed to have miraculous properties—under certain conditions to be capable of controlling life and death. If one can manage to obtain an article of food or clothing belonging to his enemy, he carries it to the sacred man of his tribe.

The priest wraps this in the leaves of trees, rubs it on “netik” stones, and places the whole between two fires. As the stones become hot, it is believed that the man to whom the article belonged WILL SICKEN AND DIE

either by a lingering disease, such as consumption, or by the quicker way of pneumonia or fever. But the sacred man, being able to cause sickness, can also cure it. The ailing one’s friend, if weaker than the priest, importunes him by presents to undo his sorcery; if stronger, by threats. When a man falls ill, neither to his relatives nor to the man himself does it occur that care and good nursing might restore him. The question is, rather, “Who is the man who is using the ‘netik’ stones?” and “Who carried the article of food or clothing to him which he is using?” If the sick one dies, he is avenged by their killing somebody (EVEN AN INNOCENT BABE)

who belonged to the tribe of the man who used the “netik” stones. A foreigner, attempting to reason with a Tannese man about this superstition, is met with the reply:—

“Netik he belong Tanna; white man he no savey: Plenty man he die along
<table>
<thead>
<tr>
<th>CONTENTS FOR 1908</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ILLUSTRATIONS</strong></td>
</tr>
<tr>
<td>A Class in Bacteriology in A. M. M. College</td>
</tr>
<tr>
<td>A Sufferer in China</td>
</tr>
<tr>
<td>A Case of Sleeping Sickness</td>
</tr>
<tr>
<td>Articles Used by Natives of the Congo</td>
</tr>
<tr>
<td>Beside the Dead Body of an African Chief</td>
</tr>
<tr>
<td>Christmas Festival in the Battle Creek Sanitarium</td>
</tr>
<tr>
<td>Christmas Dinner Given to Poor Children at the Sanitarium</td>
</tr>
<tr>
<td>Converts Recently Baptized at I kok, Africa</td>
</tr>
<tr>
<td>Dr. Royal J. Dye and Family</td>
</tr>
<tr>
<td>Dr. Edwin St. John Ward and Wife of Turkey</td>
</tr>
<tr>
<td>Dr. Chas. T. Sibley and Mrs. Annie E. Sibley</td>
</tr>
<tr>
<td>Dr. John J. Mollowney of China</td>
</tr>
<tr>
<td>Dr. C. C. Walker of Siam</td>
</tr>
<tr>
<td>Dr. Leslie’s House</td>
</tr>
<tr>
<td>Dr. Frank Van Allen, of India</td>
</tr>
<tr>
<td>Dr. Van Allen’s Hospital, Madura, India</td>
</tr>
<tr>
<td>Dr. Levi B. Salmons of Mexico</td>
</tr>
<tr>
<td>Dr. Griggs and Assistant</td>
</tr>
<tr>
<td>Dr. W orley and Medical Assistants</td>
</tr>
<tr>
<td>Dr. Wells and His Cholera Corps, Pyeng Yang, Korea</td>
</tr>
<tr>
<td>Ex-Minister Wu Ting Fang</td>
</tr>
<tr>
<td>Freshman Class A. M. M. C. and Four Others</td>
</tr>
<tr>
<td>Group of Chinese Students</td>
</tr>
<tr>
<td>Group of Missionaries at Battle Creek Sanitarium</td>
</tr>
<tr>
<td>Gypsy Smith</td>
</tr>
<tr>
<td>Hospital Building, Ng-Chu, China</td>
</tr>
<tr>
<td>Hospital for Women and Children in Northern China</td>
</tr>
<tr>
<td>Miss Emily Evans</td>
</tr>
<tr>
<td>Missionaries Traveling in Siam</td>
</tr>
<tr>
<td>Members of Chinese Medical Society</td>
</tr>
<tr>
<td>New Hospital of A. B. M. U. Hanyang</td>
</tr>
<tr>
<td>One of Bangkok’s Busy Canal Waterways</td>
</tr>
<tr>
<td>Rev. M. C. Wilcox Ph. D. of China</td>
</tr>
<tr>
<td>Rev. C. C. Creagun, D. D. Secretary A. B. C. F. M. Inc.</td>
</tr>
<tr>
<td>Rev. and Mrs. T. W. Woodside and Daughters of West Central Africa</td>
</tr>
<tr>
<td>Rev. Jacob Chamberlain, M. D., D. D., of India</td>
</tr>
<tr>
<td>Rev. Sydney R. Hodge, M. R. C. S., of Hankow, China</td>
</tr>
<tr>
<td>Rev. Robert Hamill Nassau, M. D., D. D. of Africa</td>
</tr>
<tr>
<td>Rev. Joseph Clark and Family, of Africa</td>
</tr>
<tr>
<td>Rev. J. Howard Martin and Family, of India’s Students of I. M. M. Society, New York City</td>
</tr>
<tr>
<td>“Sick Beggars’ Refuge,” or Home for the Dying</td>
</tr>
<tr>
<td>Students of A. M. M. C. Battle Creek, Mich.</td>
</tr>
<tr>
<td>Seven Hundred Miles North of Bangkok</td>
</tr>
<tr>
<td>Surgical Operations in Persia</td>
</tr>
<tr>
<td>The Sanitarium, Battle Creek, Mich. (Central Portion)</td>
</tr>
<tr>
<td>The Chemical Laboratory A. M. M. C.</td>
</tr>
<tr>
<td>The New Dispensary at Baakleen</td>
</tr>
<tr>
<td>The Local Hot Air Bath</td>
</tr>
<tr>
<td>The Martyr’s Monument, Fen-Chu Fu, Shansi</td>
</tr>
<tr>
<td>“To Us a Child is Born”</td>
</tr>
<tr>
<td>Traveling Doctor’s Outfit in China</td>
</tr>
<tr>
<td>Winona Lake Bible Conference</td>
</tr>
<tr>
<td>1908</td>
</tr>
<tr>
<td><strong>MEDICAL DEPARTMENT</strong></td>
</tr>
<tr>
<td>A Test for Internal Mobility</td>
</tr>
<tr>
<td>A Quick Method for Sterilizing the Skin</td>
</tr>
<tr>
<td>Assimilation of Iron by Nursing Children</td>
</tr>
<tr>
<td>An Important Meeting</td>
</tr>
<tr>
<td>Alcohol Never Necessary</td>
</tr>
<tr>
<td>Biliousness from Fats</td>
</tr>
<tr>
<td>Biliousness from Fats</td>
</tr>
<tr>
<td>Daily Bread</td>
</tr>
<tr>
<td>Drinking at Meals</td>
</tr>
<tr>
<td>Danger of Bacterial Infection from Ordinary Meats</td>
</tr>
<tr>
<td>Diet for Efficiency and Endurance</td>
</tr>
<tr>
<td>Effect of Tea on the Heart</td>
</tr>
<tr>
<td>Facts About Cane-Sugar</td>
</tr>
<tr>
<td>Facts About Common Salt</td>
</tr>
<tr>
<td>Gastrin, or Gastric Secretion</td>
</tr>
<tr>
<td>Gastric Lavage</td>
</tr>
<tr>
<td>Hydrotherapy in Pneumonia</td>
</tr>
<tr>
<td>Hemoptysis Treated by Means of the Towel</td>
</tr>
<tr>
<td>Henry W. Beecher’s Melancholy</td>
</tr>
<tr>
<td>Hot Air for Inflamed Joints</td>
</tr>
<tr>
<td>Hydrotherapy in Scarlet Fever</td>
</tr>
<tr>
<td>Hydrotherapy in Pulmonary Diseases</td>
</tr>
<tr>
<td>Iodin Cautery for Surgical Purposes</td>
</tr>
<tr>
<td>Intestinal Auto-intoxication</td>
</tr>
<tr>
<td>Is a Meat Diet Required?</td>
</tr>
<tr>
<td>Intestinal Auto-intoxication the Cause of Rheumatoid Arthritis</td>
</tr>
<tr>
<td>Insidious Poisons</td>
</tr>
<tr>
<td>Local Freezing and Potassium Permanganate in the Treatment of Snake Bite</td>
</tr>
<tr>
<td>Local Hot Air Bath</td>
</tr>
<tr>
<td>Local Anesthesia for the Extraction of Teeth</td>
</tr>
<tr>
<td>Medical Missions</td>
</tr>
<tr>
<td>Medical Dietetics</td>
</tr>
<tr>
<td>Meat Diet and Sterility</td>
</tr>
<tr>
<td>Mechanical Vibration for Rectal Disorders</td>
</tr>
<tr>
<td>Massage of the Back</td>
</tr>
<tr>
<td>Nerve Poisons</td>
</tr>
<tr>
<td>Of Interest to Invalid Missionaries</td>
</tr>
<tr>
<td>Other Remedies Besides Quinin for Malarial Fever</td>
</tr>
<tr>
<td>Observations on the Treatment of Epilepsy</td>
</tr>
<tr>
<td>Physique of the Bulgarians</td>
</tr>
<tr>
<td>Phototherapy and Neuritis</td>
</tr>
<tr>
<td>Pernicious Effects of Cane-Sugar in Bright’s Disease</td>
</tr>
<tr>
<td>Rational Use of Water</td>
</tr>
<tr>
<td>Rational Mind Cure</td>
</tr>
<tr>
<td>Sinusoidal Current in Atonic Dyspepsia</td>
</tr>
<tr>
<td>Swimming for Obesity</td>
</tr>
<tr>
<td>Twenty-Five Simple Methods of Relieving Pain without the Use of Drugs</td>
</tr>
<tr>
<td>The Hydriatic Versus the Pharmacopoeia Method in the Treatment of Cardiac Disease</td>
</tr>
<tr>
<td>The Rational Treatment of Constipation</td>
</tr>
<tr>
<td>The Oil Enema</td>
</tr>
<tr>
<td>The Toxicity of Caffein</td>
</tr>
<tr>
<td>The Weakest Point in the World</td>
</tr>
<tr>
<td>The Bed-Bath</td>
</tr>
<tr>
<td>The Hydriatic Treatment of Cystitis</td>
</tr>
<tr>
<td>Tea and Coffee Drinking</td>
</tr>
<tr>
<td>What Is Disease?</td>
</tr>
<tr>
<td>What Food Is Most Worth Eating</td>
</tr>
</tbody>
</table>
CONTENTS FOR 1908

GENERAL INDEX

A Brief Historical Sketch of Pioneer American Medical Missionaries........ 1
A Brief Historical Sketch of Pioneer Missionaries from Great Britain..... 100
Annual Report of Harput Mission (Turkey) : Medical Department........ 109
A Medical Missionary Rally ........................................... 183
A Roman Catholic Medical Missionary to the Lepers.......................... 190
A New Dispensary at Bankleon .......................................... 191
A Visit to Sabaths Asylum for Indian and European Lepers .............. 194
An Interesting Occasion .................................................. 197
A Wonder ful Examination .............................................. 266
An Important Endorsement ............................................. 286
Are Foreign Missions Justifiable ........................................ 368
Additional List of Medical Missionaries from the U.S. and Canada ...... 364
A Beneficial Undertaking ................................................. 377
A Great Missionary Problem at Home ................................... 360
A Leper Church Delegation ............................................. 522
A New Medical Missionary to China .................................... 529
A Letter from China ..................................................... 536
A Great Missionary Center .............................................. 537
A Work to be Done at Home ............................................ 540
An Important Meeting ................................................... 543
A "Storm Center" in South China ....................................... 627
A Marvelous Deliverance ................................................ 628
A Prayer for Busy People ............................................... 638
A New Story of Livingstone ............................................. 706
A Personal Note to our Medical Missionary Friends ......................... 872
A Hurry Call to a Burman Village ..................................... 873
A Missionary in China and his Family .................................. 871
Bagdad Medical Mission .................................................. 872
"Between the Days." ..................................................... 332
Beginnings ................................................................. 658
Busy with Medical Missionary Work ..................................... 882
Christmas Eve at the Sanitarium ....................................... 13
Cuba as a Missionary Field ............................................. 360
Call for Service .......................................................... 531
Christmas Day in Turkey ................................................ 352
Congratulatory Letter from Medical Missionaries ......................... 996
Can Moslems be Converted? ............................................ 718
Christian Medical Schools in China ..................................... 718
Christianity's Boon to Womanhood ..................................... 753
Dr. Robert S. Worley (In Memoriam) .................................. 875
European Lepers .......................................................... 104
Echoes from around the World .......................................... 698
Echoes from the Winona Lake Conference .................................. 712
Evangelistic Work in Hospitals ......................................... 877
Fed by Ravens ............................................................. 198
"Fear Not, Doubt Not." .................................................. 319
Forget and Remember ................................................... 525
Foreign Missions at Home .............................................. 536
Follow the Stream ....................................................... 689
Friends ................................................................. 872
Judgment, Grace, Glory ................................................ 10
Good Cheer ............................................................... 277
Gamble Memorial Hospital, Chungking, China ............................. 348
Gratitude of the Chinese ................................................. 868
How Suntai was Opened at the Point of the Lance ......................... 344
Heathendom's Open Door .............................................. 358
Hopelessness of a Good Character ...................................... 837
"Happiness" .................................................................. 870
Heroic Devotion to Duty ................................................ 637
Hospitals and Dispensaries .............................................. 691
In Far Shansi .............................................................. 365
Individuality in Religion ............................................... 658
In the Child's Ward ...................................................... 323
In God's Smile ........................................................... 870
"Just Be Glad." ............................................................ 354
Just the Kind of Men Wanted ........................................... 791
Kansas City under No License .......................................... 637
Korean Physicians Graduated ........................................... 378
"Light Ahead." .............................................................. 264
Largeness of Heart ....................................................... 378
Laid on the Altar ........................................................ 630
Large Plans ............................................................... 637
Letters ............................................................................ 710
Missionary Work on the Congo ........................................... 14
Medicine for her Eyes .................................................... 77
Missionaries at the Sanitarium 182, 276, 362
Missionaries for Congo Land ........................................... 388
Medical Missionaries in Persia ......................................... 372
Mission Work in Ceylon .................................................. 276
Missionaries from Many Lands ......................................... 378
Medical Missions among Moslems ....................................... 349
Medical Missionaries Heard From ...................................... 353
Mission Hospitals ......................................................... 526
Medical Missionary Hospital Work in Southern India ...................... 611
Medical Missions in Mohammedan Lands ................................. 630
Missionaries at Mountain Rest .......................................... 794
Medical Work within Sight of the Chaldees ............................... 885
"Noblesse Oblige." ........................................................ 367
None More Influential .................................................... 883
"O, How We Need a Woman Doctor." ................................ 360
"Our Suffering Sisters." By Mrs. G. D. Dowkontt ......................... 355
One Faith, One Lord, One Baptism ..................................... 635
Pioneering on the Congo ................................................ 842
Presentation of Diplomas ................................................. 534
Personal Mention .......................................................... 639
Progress in Persia ........................................................ 697
Picture of Group of Missionaries ....................................... 796
Park College and Foreign Mission ....................................... 868
Rev. Jacob Chamberlain, M. D., D. D. .................................. 637
LL. D. ............................................................................ 357
Reminiscences of Early Days in West China ............................... 350
Remarkable Decrease in Internal Revenue Receipts ....................... 385
Some Links in the Chain of a Medical Missionary's Life ................. 8
Stories from the Dairy of a Missionary Doctor ............................ 102
Statement on Behalf of Medical Education in China ....................... 269
Surgery under Difficulties in the Sudan .................................. 275
"Shadow and Sun." ........................................................ 280
San Pedro (N. W. Argentina) Mission to the Indians ...................... 291
Sickness not Divine Punishment ......................................... 392
Sketch of the late Sydney Hodge M. R. ................................ 515
Silent Times of Rest ...................................................... 530
Siam—Its Progress and Prospects ....................................... 615
CONTENTS FOR 1908

Saved from a Rubbish Heap .................................................. 638
She Gave Her All ............................................................... 704
Sold Herself to Give to Christ ............................................ 884
The Missionary Physician's Ministry to Human Suffering in All Lands .................................................. 374
The Hope of Eternal Life .......................................................... 12
The New Eng-Chum Hospital ................................................ 107
The Conference of Missionary Officials in New York City .......................................................... 180
The True Foundation ............................................................... 182
The Basle Missionary Society ................................................ 194
The Commissioning of Dr. and Mrs. St. John Ward ................. 199
True Freedom ...................................................................... 264
The Temperance Wave ............................................................ 280
Two Million Dollars for Training Leaders ................................ 270
The Jews and Jesus ............................................................... 276
Touched with the Feelings of Our Infirmities ...................................... 376
The Higher Patriotism .............................................................. 349
The Possibilities of Scientific Research in Medical Mission Work .......................................................... 520
'To Help; To Heal;’—Dispensary Work, Tyre ........................................... 521
The Mission to Lepers and The Shanghai Conference ................. 522
The Proposed Sanitarium at Atlantic City, N. J. ........................................... 537
The Time of the End .............................................................. 636
The Evangelistic Side of Medical Missions .............................. 619
The Mother's Influence in the Making of Missionaries ................. 622
The Work of the Medical Missionary from a Professional Standpoint .......................................................... 626
The Woman with the Wooden Teeth ........................................... 628
The Heroes of the Congo ........................................................... 629
The Asia Minor Medical Missionary Association ........................ 694
The Sick Poor of Dublin ............................................................ 695
The Work Limited by Lack of Room ........................................... 707
Tidings as from the Dead ............................................................ 707
The Tender Mercies of the Heathen ............................................. 708
The Cochran Memorial Hospital, Urmia, Persia .......................... 794
The Visit of the Chinese Minister to the Sanitarium ................. 798
The Freshman Class of the American Medical Missionary College .......................................................... 800
The Opening Exercises of the American Medical Missionary College .......................................................... 802
The Martyr's Memorial Hospital ............................................... 877
The Missionary Banquet ............................................................ 889
Unforgotten ........................................................................ 530
Value of a Native Agency .......................................................... 11
What the Kandundu Is .............................................................. 359
World Evangelization Movement .............................................. 658
Wanted:—A Hospital for Capiz ............................................... 876

CONTENTS FOR DECEMBER

A Mid-Winter Medical Missionary Conference ........................................... 941
A Faithful Nurse .......................................................... 942
Sfax Medical Mission, North Africa ........................................... 943
What Two Cents a Week Would Do ............................................. 944
The Syrian Protestant College, Beirut ....................................... 945
The Grave on the Hillside .......................................................... 946
Siamese Gratitude and Sympathy ................................................. 947
Progress in the Philippines ...................................................... 948
In the Wake of the Doctor ....................................................... 950
A Strange Belief in the New Hebrides ........................................ 952
The True Missionary Spirit ..................................................... 953
The Sri Tamarat Hospital, Siam ................................................ 955
The Quality of Foreign Mission Work ........................................ 956
The Effects of Water Drinking in Diabetes ................................... 957
Acid Fruits ........................................................................ 959
A Simple Method of Obtaining Sputum from Children ................. 960
Fruits as Medicine ............................................................... 960
Relief in Abdominal Pain ......................................................... 961
Thanksgiving Day at the Sanitarium ........................................... 963

ILLUSTRATIONS

Thanksgiving at the Sanitarium ................................................. 964
Bringing a Patient to Morsovan Hospital ................................. 943
Smallpox Fighters in Siam ...................................................... 947
A Busy Street in Bombay ....................................................... 951
Thanksgiving at the Sanitarium ................................................ 968
A native convert named Lomai, becoming a believer in the gospel of peace, went about among the tribes where there was angry "netik" talk, and also among those who were at war, trying to put an end to the bloodshed which is the curse of Tanna. "Long ago," he said, on one of these expeditions, "my grandfather stood upon these stones to talk to you about the old fashion, and now upon these same rocks I tell you a new and better fashion." His hearers, puzzled as they looked at the man of brawn and muscle preaching peace, shook their heads and said, "THIS IS NEW TALK; this not the old talk belong Tanna."

In times of war the position of envoy was by no means a safe one. Treachery in warfare is considered permissible by the Tannese. To shoot an unarmed ambassador from behind is looked upon with favor under certain conditions. But Lomai, naturally fearless, had the added contempt for danger of the seasoned warrior. "Misi," he said to Mr. Paton, who was hesitating to meet a fierce clan who were threatening to kill a missionary on the East, "Misi, they are like other men; and if we go and LOOK INTO THEIR FACES they will be friendly and let us talk to them."

When a weak tribe beaten in battle came for help, Iavis and Lomai gathered a band of volunteers to bring them bodily to Lenakel. It was a dangerous and wearisome undertaking. The lame and blind and infirm had to be helped along mountainous paths, and the enemy were near. When guns banged around them, Lomai was confident: "Don’t be afraid," he said; "God has sent us to-day, and WE ARE SAFE IN HIS KEEPING. It is salvation and not death that has come to you to-day."

He had a baby on one arm, and with the other he helped an old woman bent double with age. The party arrived safely at Lenakel, so tired they could scarcely move. Next morning Lomai heard that a helpless old woman had been left behind. He blazed with indignation: "What did you bring on your backs? Sticks and rubbish that will rot away. And yet you left a woman who can never die. Tell me where you have left her, and I will go back for her."

Though sore in every joint, Iavis and Lomai returned for the old creature. She had just strength enough left to murmur, "Water; I am dying." When she revived, they put her on a rude stretcher and carried her home.

This gallant and Christlike treatment was from men accustomed from childhood to cruelty in its most hardening forms, and who six years before had been heathen! The grace of God can so change the heart even of a cannibal.

THE TRUE MISSIONARY SPIRIT

The following extracts are from a letter by Dr. S. P. Dunlap in Siam:

"I wish that I could write you a full account of our long tour, in many respects the grandest we have ever taken. I should like to live a hundred years for this kind of work. The greatest joy in the world is to be found in telling others about our precious Lord."

"During this tour it has been our privilege to received twenty-one adults and three little ones into the company of disciples on this Peninsula. By faith I can see a large ingathering for the Master here, and that not many years hence. Let us pray and labor for it. ‘According to your faith be it unto you.’ Dear friends, pray that we may have many more years for the precious work in Siam. Let us be hopeful, trustful, faithful and lovelful.

"In crossing the Peninsula we took a new route, that we might publish the gospel to those who had NEVER BEFORE HEARD IT After about one month’s work in Chumphon and the Island of Samooie, we entered Bandon. There we had precious service and there we struggled to save some of the poor people from the grasp of that dread disease—cholera. From here we went by canoes up the right branch of the Loogang River, stopping for work in many settlements, in the ampurs—Keree, Panom, and Pasang. At these places we talked from a large
map of the world and Bible pictures. We also used many scientific slides, illustrating the rotundity of the earth, diurnal motion, eclipse, etc., etc. The hospitality of the Siamese people, the kindness of officials, all the way, would be hard to surpass.

"At Ampur Panom, we failed to get elephants enough for our party and baggage,—medicines, books, and camp outfit making no small amount of baggage. The elephant offered to Mrs. Dunlap and myself was very cross. We were advised not to mount him. So I said 'WIFE, WHAT SHALL WE DO?' With her usual courage she answered by taking off her shoes to wade the first stream and said, 'Let's walk.' And walk we did for thirty miles, through jungle, over mountains through streams, forests and broad plains, making the thirty miles in two days. Not bad for old folks in the tropies, was it? On the second day at three p.m. we reached the place and were soon surrounded by people eager for medicines and to listen to the teachings.

"Shortly after dark, feeling rather weary, we retired. I should not have said 'retired', for we slept on the ground, the first time in all our itinerating experience that we have had to do so. But we were

TOO SLEEPY FOR STAR-GAZING.

and slept as soundly as we could have in a soft bed at home. One of the first things in touring is to be able to feel at home wherever night overtakes you. In the early morning we received elephants for the remainder of the journey to the edge of Panga Province. We were kindly received by the kamnan, who shared part of his home with us. Here we were thronged by people troubled with red eyes and fever, and worm medicine for the children was in demand.

"Two days' canoeing brought our journey over the Peninsula to a close. We were sixteen days in crossing, going slowly because we wanted to sow good seed all the way. We were given

A HEARTY WELCOME BY THE DISCIPLES in Panga. I wish I could tell you of our three months in that charming province and introduce you to some of the followers of Jesus there. It was our joy to receive twenty-one into the little company here. At one service they resolved to build a place for the Master and at that same service, enough money, material and labor were subscribed for a chapel and rest-house for the missionary. During our sojourn here Dr. Bulkley came and I was truly glad to see a real doctor. From Panga we went to Puket where we had a good interview and also a good dinner with the High Commissioner. Our interview was concerning the hospital which His Excellency is about to build for our mission. He is in earnest about it. Subsequently we spent twelve days in Tap Teang, Trang,

WHERE THE HOSPITAL IS TO BE BUILT.

His Excellency had instructed the governor of the province to meet us there, and together we selected the ground for which His Excellency paid $350. He drew up plans for the hospital and a dwelling for the medical missionary. The location is good and the work is to be soon taken up. You may imagine the joy that fills the hearts of your old friends over the establishment of a mission station for the Montone Puket. For this we have labored fifteen years, and now it seems to come to pass in His Name.

"We were one day in a steam launch, two days by bullock cart, four days on elephants and four days in canoes in crossing from Trang to Bandon.

"During the tour we were able to reach

MANY PLACES NEVER BEFORE REACHED by the Christian missionary. At Bandon a disciple is holding on to a good piece of land with the hope that the mission may occupy it as a station. Let us hope and trust for this. Bandon now rivals Nakawn in population, for one island and three districts of the Nakawn Province have now been added to Bandon. More than fifty Christians are living within easy reach of Bandon city.

"In Bangplasoi we found the people both interested in our message and appreciating our efforts to heal. Many visited our house in the market. But
WE SUFFERED GREATLY
from the heat, and after enduring it a few nights, felt compelled to secure a
cooler place to eat and sleep. There was
the usual run of medical cases and some
in which the most startling remedies had
been used. Such as, for a cut wrist a
young mouse burnt to a cinder and
applied.

"During the frequent stops for rest,
food or sleep we improved the time
giving the Gospel message, selling books,
treating some sick, and vaccinating.

Near our destination, a Chinese of sev­
eenty having calculus, was visited and
advised to follow on to the hospital at
Pitsanuloka for operation. Three days
later, we had the pleasant surprise of
seeing him there, and shortly afterward
of sending him home

MINUS HIS PAINFUL AFFLICTION
but with a fair knowledge of the Gospel
story.

Three months were very enjoyably
spent in Pitsanuloke assisting Dr. Shell-
man in the work of the hospital and in
charge of the latter during his absence
on a tour. A daily hospital service was
held which Kroo Tooie and I led in turn.

"Securing Kroo Chuang of Petchaburi
as my medical assistant, I soon left
Bangkok by steamer for Singapore,
thence to Penang and on up to Panga on
the Bengal coast."

Mrs Dunlap writes:—

"The day after our arrival we baptized
one of last year’s patients, a crocodile-
bitten cripple. All we had done for
him was to make a pair of crutches,
the first ever seen in that region. What
a change it had made in his life! From
lying on his back

HELPLESS FOR SEVEN YEARS,
he was now an active independent member
of the community. I did not recognize
him, even his name changed from ‘dog’
to ‘happy’. It was hard to make him
admit his former name. His mother was
baptized with him, the first woman in
Panga.

"From Panga we took a short trip
to Puket, interviewing the High Com-
missioner, His Excellency Phya Ratsada,
in respect to the hospital that he ex-
pected to build for us at Tap Tieng.
This is still
pensary, and the chapel chairs, and also the fencing of the hospital compound have all been paid for.

FROM THE MEDICAL RECEIPTS.

Among these present at the opening were H. E. Phya Chone, the High Commissioner, H. E. Phya Trang, the Governor, and nearly all of the local officials and business men, about seventy-five in all. The exercises consisted of the opening prayer by Mr. Post, and account of the collecting of the fund and the expenditure of the same, with a short history of the progress of the medical work at the Station from the time of its opening. H. E., the High Commissioner, gave a most appreciative address. After this, light refreshments were served and the friends were conducted on a tour of inspection through the buildings. Many expressed themselves as greatly pleased with the hospital and its equipment.

During the year we have treated 134 in-patients, 113 of this number being received since the opening of the new hospital. We have performed nearly one hundred major operations, besides a larger number of minor ones. We have treated 8,997 dispensary or out-patients, dispensing 9,972 prescriptions or portions of medicine. We have made 194 visits, treating 7,417 persons. Vaccinations have all been with free virus. Our medical receipts for the last fiscal year were $3,000, the whole amount being expended in the work. During the four months of the present fiscal year just ended, the receipts have been $1,000. With the increased work and receipts there has come increased expenditure; for instance, the hospital staff has been increased from four to ten helpers.

The most hopeful part of our work is with the in-patients, because they become intimately acquainted with us and we with them, and during their convalescence is the most impressionable time to teach them of the love of the great physician. Nearly all of the in-patients, as soon as they are able to leave the wards, attend regularly the daily morning chapel service. On Wednesdays we make an effort to have a special message for those who may have never before heard of the love of Jesus, as this is our vaccinating morning, and we are sure of an entirely new crowd of listeners of from seventy-five to four hundred, counting mothers, fathers, and babies. We believe this to be as advantageous as general touring and in some ways a little more so, as the people come to us, instead of our going to them. Another of our special efforts to reach the in-patients is our Sunday afternoon service in the chapel, alternately in charge of the Doctor and his first and second assistants, and occasionally assisted by Mr. Post and Mr. Eskels. Mrs. Eskels has recently opened a Bible reading course with the women in the wards, planning to occupy an hour every afternoon.

During the time of Dr. and Mrs. McFarland’s visit at the close of an evening preparatory service, several of the patients came before the session and openly declared their belief in the Christian religion. Later, an inquiry class was organized, with Mr. Post and Kroo Chaang, an elder, as teachers. This class grew until there were nineteen names on the roll. At a special communion season six of this number were received into the church. A few weeks ago we opened a second class of ten members, and at the last communion two more were baptized and received into the church. There are yet a number on probation whom we expect to receive later.

We praise our Heavenly Father for this small beginning in the work of healing souls as well as diseased and suffering bodies, and we trust this work will continue to be owned and blessed of God, until every patient will go out from these wards a Christian, to be a light in the darkened homes from whence they came.

Doctor.—Now, my boy, show me your tongue. That’s not enough. Put it right out.

Small Boy.—I can’t—’cos it’s fastened at the back!
THE EFFECTS OF HYDROTHERAPY AND WATER DRINKING IN DIABETES

Professor A. C. Croftan read before a recent meeting of the Mississippi Valley Medical Association an exceedingly valuable paper entitled, "Experimental notes on the Treatment of Diabetes." In this paper Professor Croftan shows that diabetes is not due to deficient activity of the glycolytic ferment. Professor Croftan has shown by careful experimentation that the sugar normally contained in the blood and the lymph "is destroyed on standing at blood temperature." If sugar is added to blood or lymph, a considerable part disappears within a few hours under the same conditions. The lymph is found to possess greater sugar-destroying power than the blood, while serum, whether prepared from blood or from lymph, does not destroy sugar; neither is sugar destroyed by the red-blood cells. It is thus apparent that the sugar-destroying power rests in the white cells. Further experimentation shows that it is due to a special ferment which is carried by the leucocytes and is by them transmitted to those portions of the organism where the oxidation of sugar is required.

The old theory that the pancreas is headquarters for the production of this ferment has been abandoned, for the reason that further experimentation has shown that many tissues of the body produce the sugar-destroying ferment, the liver producing more, bulk for bulk, than does the pancreas. The most recent researches show that the pancreas and the suprarenal capsules are regulators of the oxidation of sugar.

Professor Croftan has brought out by his experimentation several other interesting facts. He has demonstrated, for example, that for the action of the sugar-destroying ferment, slight alkalinity, such as the blood naturally possesses, is most favorable, while acidity greatly impairs the action of the ferment. He also found that an increase of sugar over four-tenths per cent lessened the activity of the ferment; and still further made the interesting discovery that a temperature of 104° F. was most favorable to the action of the ferment. These experiments were made for the purpose of ascertaining by what means the activity of the sugar-destroying ferment might be increased, hoping thus to place the therapeutics of diabetes upon a rational basis.

In connection with the facts above stated as resulting from Professor Croftan's experiments, it is interesting to note the clinical observations which have heretofore been made in the employment of hydrotherapy and allied measures in dealing with this disease.

It has long been known that cold baths are of great value in diabetes when properly employed, and it has been supposed that this was due to the fact of cold increasing oxidation. Strasser has shown, however, that cold baths increase the alkalinity of the blood, and Croftan's observations would now lead us to the conclusion that is is through the increase of the alkalinity of the blood, thus increasing the activity of the glycolytic ferment, that cold baths are effective in lessening the presence of sugar in this disease. The writer has often seen the sugar diminish one-half in a few days under the influence of cold bathing, and has in many cases seen sugar disappear entirely as the result of daily swimming in water at a temperature of about 70° to 78°, for fifteen to thirty minutes. In swimming, the burning up of sugar is encouraged both by the low temperature of the water and the muscular exercise, a very happy combination of physiologic measures, applicable to diabetes as well as to obesity and some other maladies due to disturbed metabolism.

Professor Croftan's observations also call attention to the importance of water-drinking in diabetes. Not infrequently patients are advised to drink as little water as possible, the idea being to decrease the outflow of urine. For many years the writer has felt that this advice was not rational, and has placed no limit upon the gratification of thirst. He has advised his patients to drink whenever thirsty, but not to take a large
quantity at once. Drink frequently, but little at a time. This has been shown to be a most effective means of diminishing the specific gravity of the blood. As shown by Professor Crofton, the more nearly the quantity of sugar in the blood can be kept down to normal, the more active will be the ferment.

Hot baths as well as cold baths are known to be effective as means of increasing oxidation. Hot baths, prolonged sufficiently to raise the temperature of the body a few degrees, may increase oxidation to more than three times the normal amount. Hot-water baths, vapor baths, and especially the electric light bath, are the most effective measures for raising the body temperature. The writer has often raised the temperature of the patient to 109° or 103° by fifteen or twenty minutes' exposure to a vapor, Russian, or electric-light bath. The hot blanket pack, the ordinary hot full bath, or even a dry pack—that is, wrapping the patient in blankets and placing hot water bottles about him—may suffice to accomplish the same end, though less effectively. But in the use of the hot bath great care must be taken in diabetes because of the depressing effect upon the heart. An ice bag should be kept over the heart during the application. This kind of bath must not be too frequently repeated on account of its depressing effect. When hot baths are employed, care should always be taken to follow the hot bath by a cold application of some sort adapted to the patient’s state. This is necessary for the reason that hot baths alone have the effect of diminishing the blood alkalinity.

The cold bath, water drinking, and regulation of the diet are most suitable measures for daily use.

It is interesting in this connection also to recall the fact that short hot baths followed by any cold procedure by which thoroughlygoing reaction may be induced, produce very pronounced leucocytosis. In some cases there has been observed an increase amounting to as much as three hundred per cent. Since the white corpuscles are the carriers of the glycolytic ferment, it seems very evident that such an increase of white cells must have a decided influence to increase the oxidation of sugar. This effect of the cold bath is especially worthy of consideration in view of the fact that the white cells are often found deficient in diabetes.

Another interesting research conducted by Professor Crofton showed the activity of the salicylates of the alkalies in increasing the action of the glycolytic ferment. Carbolic acid was found, also, to act in a similar way. The writer believes, however, that these chemical agents can not be looked upon as in any degree an improvement on the physiologic measures above referred to, for the reason that cold baths, water drinking, and exercise may be continued indefinitely without any injury to the body; whereas, the constant introduction of drugs must sooner or later induce evil consequences. In giving salicylates and carbolic acid, one must remember the kidneys and the liver, and also bear in mind the fact that these organs are in diabetics already enormously overtaxed, especially the kidneys. This disease is in most cases not merely a passing disturbance, but is due to failure of the organism, more or less permanent, in character. The vitality is injured and can perhaps never be fully restored; hence, those measures are most desirable which can be used for an indefinite length of time. and those remedies are to be found in regulation of the diet, exercise, cold bathing, and water drinking.

The alkalinity of the blood may be increased by starvation more effectively than by any other method. This is due to the fact that in the starving state the acid tissue wastes are completely oxidized, and the solubility being thus greatly increased, they are readily eliminated from the body. It has long been known that starvation is, perhaps, the most effective of all means of diminishing the percentage of sugar in the urine in case of diabetes, but this measure is of little practical value, for the patient’s nutrition must be maintained.

Professor Crofton has added another foundation stone to the rational therapeutics of diabetes by his carefully conducted investigation for which he deserves the great thanks of all who are interested in the progress of scientific medicine.
Gautier, the latest French authority on dietetics, after exhaustive discussion of the non-flesh regimen, sums up the subject as follows:—

"We conclude that with the addition of milk, butter, and eggs, the vegetarian regimen has great advantages. It alkalizes the blood, exhilarates oxidation, diminishes toxins and organic wastes, which lessen the liability to diseases of the skin, to rheumatism, congestion, etc. This regimen tends to make us peaceful, not aggressive and violent. It is practical and rational. It must be accepted if one pursues the ideal of the development and education of a race, gentle, intelligent, and artistic, yet prolific, vigorous, and active."

These views of Gautier's acquire especial weight when it is recalled that this same author, thirty years ago, in a work entitled "Chemistry as Applied to Physiology and Hygiene," attributed to the flesh diet the special advantages which to-day he recognizes as pertaining to a rational diet, excluding all flesh foods.

**ACID FRUITS**

Nearly all fruits contain more or less acid. The acids of fruits are three: citric, malic, and tartaric. Tartaric acid is found in grapes; citric acid, in cranberries, lemons, and oranges. The principle acid of other fruits is malic acid—the acid of apples. The pear and the blackberry contain the least acid of any fruits, the proportion being about one-fifth of one per cent. The strawberry, grape, cherry, peach, apples, and prune contain one per cent of acid; while one and one-half per cent of acid is found in the whortle-berries, raspberry, gooseberry, plum, and apricot. The cranberry, the currant, and the orange contain two and one-half per cent of acid; while the lemon, the most acid of fruits, contains seven and one-half per cent of citric acid.

All fruits contain sugar in larger percentages than acid, and in some instances the proportion of sugar to acid is so great that there is almost no acid flavor, but the acid is present and exercises its special purpose just the same as if the sugar were not present. The grape contains the largest proportion of sugar, more than fourteen per cent. The cherry comes next, with ten per cent. The lemon and the pear contain a little more than eight per cent of sugar; the strawberry, currant and prune, six per cent; the orange, apricot, peach, blackberry, raspberry, and whortleberry, from four to five per cent; the plum, a little less than four per cent; and the cranberry, least of all, one and one-half per cent. The cranberry is the only fruit which does not contain more sugar than acid. The currant contains three times as much sugar as acid, yet it is still quite acid, while the lemon is intensely acid, although it contains nearly one per cent more sugar than acid. The strawberry contains nearly six times as much sugar as acid, and the cherry ten times as much.

The acid of fruits gives to them their most important value. They are natural disinfectants for the alimentary canal. None of the ordinary germs which thrive in the stomach and the intestines can live in ordinary fruit juice. It is only of late that this germicidal property of fruits has been appreciated.

**A NEW AND SIMPLE METHOD OF OBTAINING THE SPUTUM IN CHILDREN**

Leonard Findlay (Arch. of Pediatrics, February, 1904) in discussing this subject, calls attention to the importance of examination of the sputum in children, and especially babies. The author thinks it more important in these cases than in adults, as the pulmonary findings are not so marked. The method of obtaining sputum is as follows:—

With a piece of gauze on the forefinger, the pharynx, and especially the epiglottis, is irritated so as to induce coughing, and any expectoration that is coughed up is swept out of the mouth with the finger before the child has had time to swallow it. The amount obtained by this method varies much, but is usually of sufficient amount for bacteriological examination if tuberculosis is suspected in the child, as the first attempt often fails. The author believes that the diagnosis in these cases can always be made before the child comes to the post-mortem room.
FRUITS AS MEDICINE

An American authority, who has looked into the subject, claims that nature has been lavish in providing remedies for many of the common ailments. Fruits often relieve diseased conditions of the body by encouraging natural processes. Taken early in the morning, an orange acts decidedly as a laxative, sometimes amounting to a purgative. Other laxatives are figs, tamarinds, prunes, mulberries, dates, nectarines, and plums.

The astringent fruits are pomegranates, cranberries, whortleberries, blackberries, prickly pears, black currants, and melon seeds.

The refrigerants are gooseberries, red and white currants, pumpkins, and melons of all kinds. Those coming under the head of stomachic sedatives are lemons, limes, and apples.

Figs, split open, form excellent poultices for boils and abscesses. The juice of a lemon will remove tartar from the teeth.

The oil of cocoanut has been recommended as a substitute for cod liver oil, and is much used in Germany for phthisis.

Barberries, after being made into a drink, are used for fever patients. Apples are useful in nausea, and even in seasickness and pregnancy. Bitter almonds are useful in a cough. Grapes and raisins are nutritive and demulcent, and are gratefully received in the sick room.

ABDOMINAL PAIN

Dr. Deaver makes the following very excellent remarks on the differential diagnosis of this very common symptom:

"There are a few affections which it is so essential to diagnosis correctly, and in which an error is productive of such grave results, that particular pains should be taken to avoid mistakes. Among these the abdominal pain due to thoracic disease, is of great importance. In the case of pneumonia or pleurisy, where there is pain referred to the upper abdomen, the presence of a cough, rapid breathing out of proportion to the pulse, associated with high temperature,—breathing in which the nose takes an active part, together with the presence of cyanosis,—this should satisfy us as to the thoracic nature of the disease. Examination of the chest should show the presence of physical signs.

"Perforated typhoid or gastrointestinal ulcer is capable of simulating chest disease from dyspnea, cyanosis, and the condition of the abdominal walls produced. Peritoneal friction consequent on perforated gastric ulcer has been mistaken for perirites friction.

"Uremia, as is well known, may be accompanied by almost incessant vomiting; and Musser has called special attention to abdominal pain due to uremia. He has seen it precede the uremic convulsions or puerperal nephritis.

"The presence of severe abdominal pain when associated with vomiting always calls for careful examination for the presence of a hernia, as the rupture may be so small as never to have attracted the notice of the patient. On the other hand, the pain caused by appendicitis has been thought to be due to strangulation of a hernia, which, when operated on, was found to be uninflamed, though irreducible.

"In intestinal colic after eating indigestible food, the pain is usually accompanied by vomiting. In colic due to poisoning with lead or brass the pain may be very severe and the paroxysms may continue for many days, accompanied by rigidity and tenderness of the abdominal walls. Pal has expressed the opinion that the pain of lead colic is due to irritation and constriction of the blood ves-
sels in the intestinal walls, which indi­
rectly irritate the sympathetic nerve fila­
ments. He has shown that this vascular
tension is increased, during the persist­
ence of the pain, from one-half to twice
the normal pressure.

"It must not be lost sight of that in
the passage of gall-stones the pain may
be referred to the right groin, and hence
may be mistaken for that caused by ap­
pendicitis; but the history of the sud­
den onset, and possibly the previous
passage of calculi, the intensity of the
pain, perhaps the presence of shock and
the marked board-like rigidity of the ab­
dominal wall, the pulse not being accel­
erated, and the absence of temperature,
should be very suggestive of the former.

"I have seen renal colic mistaken for
intestinal obstruction, chiefly, I believe,
on account of the presence of bowel dis­
tension and inability to move the bowels
owing to large and frequent doses of
morphin having been administered. I re­
call one case in which the diagnosis of
intestinal obstruction had been made;
to this diagnosis I took exception, diag­
nosing the condition as renal colic;
eventually the ureter was found blocked
by a stone. In this case the bowel symp­
toms were the result of frequent and
large doses of morphia.

"Pain referable to the loin and shift­
ing in the direction of the groin, with
 tenderness of the kidney, the presence
of blood in the urine, and particularly
if the patient has suffered like attacks
in the past, would be of great value in
excluding serious intraperitoneal lesions.

"In perforated duodenal ulcer the in­
flammatory exudate of the extravasation
of the contents of the bowel may extend
so far downward as to simulate an an­
pendical abscess; and when the patient
is first seen after this extension of the
process has occurred, it may be impos­sible to differentiate between the two con­
ditions until after the abdomen has been
opened. If an accurate history of the
attacks is obtainable, however, or if the
case is seen at the time the perforation
occurs, the different locations of the
symptoms and the more marked shock,
together with a history of more or less
chronic pain in the duodenal region,
should enable a differential diagnosis to
be made.

"The pain of a perforated gastric
ulcer is not always sudden at its onset,
and, therefore, peritonitis may be pres­
ent before the condition is recognized;
but in cases of abdominal pain, when
there is reasonable doubt, the abdomen
should be opened before peritonitis oc­
curs, as it is better to err on this side
than to defer operation until too late to
accomplish any good. The absence of
liver dullness in perforation of the gas­
trointestinal canal, particularly in per­
forated typhoid ulcer, is not always sig­
nificant, as this condition may be
brought about by great distension of
the colon. The passage of fluid from
the stomach into the lower abdomen in
some cases may explain this position of
pain.

"The twisting of the pedicle of a freely
movable kidney and obstruction of the
renal veins which leads to congestion of
the organ is a cause of abdominal pain
which must be borne in mind; also trac­
tion on the duodenum by a movable kid­
ney, causing severe attacks of abdominal
pain and vomiting.

"A cause of abdominal pain, which,
it is true, is rare, yet which must not be
lost sight of, is embolism of the mesen­
teric vessels. This produces pain, vomit­
ing, and constipation so closely simulat­ing
intestinal obstruction and peritoni­tis as to render it impossible to deter­
mine the exact condition. Acute hem­
orrhagic pancreatitis so closely simulates
acute intestinal obstruction that a differ­
tial diagnosis is not always possible.

"The abdominal symptoms, the re­
results of irritation of the sympathetic
ganglia or nerve roots in the lower ab­
dom, may simulate acute disease of
the abdominal viscera. The viscer­
al crises of locomotor ataxia and dof the ery­
thematosus group of skin diseases, refer­
tence to which has already been made,
are probably to be explained on this
hypothesis. Buch has called attention
to abdominal pain due to the presence of
arteriosclerosis. The manifestations
of this condition in other regions of the
body are now fairly well known, and those
due to arteriosclerosis of the vessels of
the splanchnic area thus described by
Buch, who divides these patients into
two main classes. In the first class the
abdominal symptoms dominate the
picture. The patients, usually over forty years of age, are unexpectedly seized with severe attacks of epigastric pain, resembling more or less closely the typical attacks of angina pectoris. These attacks may last from a few minutes to an hour, and may recur many times a day, being often precipitated by the factors usually provocative of the attacks of angina pectoris. In the second class he places those patients in whom anginoid attacks, or true angina pectoris, are present. In patients subject to this abdominal pain of arteriosclerotic origin there is present almost always distinct evidence of arterial degeneration in other parts of the body; and as the abdominal pain is practically independent of digestive disturbances, and is only exceptionally attended by meteorism, the diagnosis, he thinks, should not be impossible if the condition is borne in mind. Tenderness of the abdominal aorta may often be elicited, but the aorta is seldom enlarged or misplaced.

"The pain consequent on ruptured extrauterine pregnancy is always accompanied by a pallor, which is usually extreme; and there may possibly be shifting of the dulness in the flanks. It is usual, moreover, in these cases to obtain a more or less typical history."

In his discussion of the treatment of this condition, Dr. Deaver especially warns against the use of opium, which he regards as one of the most absurd drugs in materia medica. He also speaks most emphatically against the habit of dosing patients with castor oil or paregoric, and against the application of mustard plasters and icebags without first having made an exact diagnosis. Dr. Deaver is quite opposed to the use of opium in cases of appendicitis, and inflammatory conditions of the peritoneum. Lawson Tait was one of the first to depart from the ancient custom of using opiates in these diseases. Dr. Deaver is one of the oldest advocates of these views in this country. He confines the use of opium in abdominal pain to cases of malignant disease.

Pain due to foreign bodies which have been swallowed should be treated by Billroth's method,—the taking of a large quantity of mashed potatoes and other soft foods, avoiding emetics and laxatives. The importance of rest in bed in Pott's disease and various other forms of abdominal pain, as in nausea and vomiting from gastritis and varicose veins in the stomach, and cases of pelvic pain, is well emphasized, but the Doctor seems to have overlooked the great value of heat as a means of controlling pain. There is no other measure so valuable. Heat exercises marvelous inhibitory power, acting through the thermic nerves, and this is especially manifested in lessening nervous sensibility.

The most happy effects are obtained in cases of visceral pain. The direct contact of extreme heat with the sensitive surfaces sometimes increases the pain through the stimulating effect of heat, but when acting reflexly the inhibitory effect seems to be dominant. When abdominal pain is due to congestion, great relief may be obtained in many cases by the application of heat to the lower extremities. The effect of the hot-foot-bath in relieving dysmenorrhea is a good illustration of the effect of heat. In cases of abdominal pain, wonderful results may be obtained by the hot hip and leg pack. When there is an inflammatory tendency, the beneficial effect is increased by the application of icebags over the seat of pain simultaneously with the hot pack. After the hot pack the legs should be wrapped in moist towels covered with oiled muslin or mackintosh, and afterward warmly wrapped with flannel, so as to obtain quick heating and retention of the heat. By this means the lower extremities are filled with blood, thus producing a collateral hyperemia, which relieves the tension of the vessels of the diseased region. The ice-bag may be applied over the seat of pain at the same time, thereby contracting the vessels of the affected part, and so lessening the pressure upon the sensitive nerve ends. This method is applicable to all forms of abdominal pain, also to pain in the trunk and upper part of the body, and is a most efficacious means of combating the inflammatory processes of any viscera.
THANKSGIVING DAY AT THE SANITARIUM

It is the wish of the Sanitarium that the day set apart for general giving of thanks to God shall be observed in that institution in a proper and sincere manner to express to our Heavenly Father a sense of the gratitude we feel for the blessings conferred upon us and those who have been with us during the year. Certainly there is no place where thanksgiving is more called for than here, where throughout the entire year we are experiencing continual manifestations of the goodness and compassion of Heaven.

The Thanksgiving dinner served by the Sanitarium was a bountiful repast of wholesome foods prepared and served in a way to delight the eater and to leave his conscience free from any compunctions of having caused the death of any of God’s creatures. Guests and helpers all partook of the same menu, which was as follows:

<table>
<thead>
<tr>
<th>Menu</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diced Grape Fruit</td>
</tr>
<tr>
<td>Tomato Bisque Sanitas Wafers</td>
</tr>
<tr>
<td>Roast of Vegetable Meat—Dressing Parisian Potatoes</td>
</tr>
<tr>
<td>Creamed Chestnuts</td>
</tr>
<tr>
<td>Hubbard Squash Bermuda Onions</td>
</tr>
<tr>
<td>Cranberry Jelly Bipe Olives</td>
</tr>
<tr>
<td>Celery Radishes</td>
</tr>
<tr>
<td>Mint Lemonade Raspberry Nectar</td>
</tr>
<tr>
<td>Fruit Buns</td>
</tr>
<tr>
<td>Mince Pie Pumpkin Pie</td>
</tr>
<tr>
<td>Yogurt Cheese Chocolate Crisps</td>
</tr>
<tr>
<td>Malaga Grapes Apples</td>
</tr>
<tr>
<td>Cereal Coffee</td>
</tr>
</tbody>
</table>

The following verses, composed by one of the guests, was sung as grace before the meal:

Once more around this festal board
We come Thy name to praise,
And thank Thee for Thy goodness, Lord,
That crowneth all our days:
For life and health and daily food,
For friends and kindred dear,
For all the way Thy hand hath led
Throughout another year.

Be with us still to bless, O Lord,
In all the days to come,
And sanctify to us, we pray,
The joys of hearth and home;
May thought and work and deed express
The love we owe to Thee,
And thus may every day of life
A glad Thanksgiving be.

In the evening an entertainment was prepared and presented in the gymnasium for the benefit of the entire family. The main feature consisted of an exhibition showing some of the supplies consumed by the Sanitarium for the year, and also some of the mechanical appliances and departments. There was a booth erected of old fence-rails and surrounded by corn shocks and pumpkins which contained Sanitarium ducks and turkeys, still alive and thankful that they belonged to a merciful family. Next to it Head Engineer Clough had arranged an exhibition of a miniature steam engine with dynamo and electric-light plant and pump. Then the laundry had a very attractive show exhibiting the amount of work done in that department, which was a revelation to us outsiders. In another place Steward O. C. Edwards had arranged a beautiful show of the victualling department, with samples of foods and fruits consumed, and figures showing the amounts. Mr. Cleveland and his men put in a brilliant booth showing the electrical department. It was resplendent with light, and curious with appliances and conveniences for cooking, laundring, and therapeutics. Then the cooking-school had a booth, where was dispensed to the thirsty and hungry apple-juice, apples, and popcorn.

A short literary program was thrown in, consisting of the song “Harvest Home” well rendered by a double quartette of male voices, and a short address by Dr. J. F. Morse giving a history of “Thanksgiving.” The orchestra was located in the gallery among the evergreens and discoursed sweet music throughout the evening.

Thus was spent a very profitable and enjoyable evening. The gymnasium was adorned with the fruits of the year to remind us of the divine bounties, and the attendance was very large.
THANKSGIVING AT THE SANITARIUM
THE QUALITY OF FOREIGN MISSION WORK

While efforts are being made to increase the quantity of help sent to distant fields in response to the opportunities and urgent calls that present themselves, and while we are urging men and women to give themselves to this work, it is well to remember that the quality of this work requires careful consideration. The idea has obtained currency in some circles that almost any grade of talent would answer among the heathen, provided it was attended with sufficient consecration to enable the worker to endure the necessary trials and hardships to which he would be exposed. If a man had the heroism to offer himself for the place, or had the gumption to get himself appointed, or the zeal that commended him as a man who was in the habit of doing things, he was very apt to be accepted as a providential acquisition to the foreign field, even though his mental and spiritual culture might have been somewhat neglected.

This has never been good policy, and has been condemned many times over, and the time has come when the futility of sending mediocre workers half way around the world must become apparent. The time is rapidly drawing near when there will be no call for laborers in distant fields except as leaders and counsellors. In most of the fields a large number of native born laborers are being raised up upon whom the weight of evangelical work is now falling. The native worker, other things being equal, is better adapted to the work than the imported articles can be. And as Christianity begins to attract the attention of men of influence there will come into the ranks workers of ability and influence, men of power in their own country. And with such men in the ranks it would be useless to send men of inferior abilities from this country.

It may come as a surprise to many people in this country to learn that there are really men of ability in other lands than our own. We are apt to think to the contrary. When the Russia-Japan war broke out there was quite a sympathy with many in this country for the smaller party. And a number of men offered their services to poor ignorant Japan. Some surgeons of renown made offer of their services. The offer was graciously recognized by Japan and declined with all possible appreciation, much to our astonishment. What could the Japs be thinking of not to avail themselves of the knowledge and skill of men who were the pride of our great nation? Our astonishment took a new form, however, when the practical wisdom of Japanese medical science began to show itself in results never attained or even dreamed of by any other nation. The Japanese soldiers were looked after with a skill and a care never before known or practiced in military circles, and we began to know why our services were not required. They too had men of skill and learning.

This is but an illustration of the situation in many other respects. When once these nations arise and take up the gospel work and bring their talents to bear upon it, the men who go there to labor with them will need to be men of superior ability, of superior spirituality, men who are capable of standing in the front ranks in this land, or they must necessarily become mediocre there as they would be at home.

This is as true of medical missionaries as of other workers. The advice that comes to us from all stations is that our workers become well prepared. The best of preparation is none too good. Anything but the best will not do. Another reason for requiring the best of preparation for the mission field is that the enemies of the cross will be more than ever active and powerful. While Christianity is but a small factor and exciting but little notice the greater minds do not notice it, but as it comes into prominence there will be gigantic efforts made to oppose it. These enemies will need to be matched with the best that Christianity can send. Mere learning or human talent will not do; for there will be no end of that on the other side—the power and presence of Him whose work it is will be needed as it was needed in the early days when the Gospel grappled with the philosophy and wickedness of Greece and Rome.

G. C. T.
Offer Par Excellence!

Through arrangements with the publishers of the REVIEW OF REVIEWS, the most valuable periodical in its line in this country, we are enabled to place before our readers an excellent opportunity to obtain choice reading for the year at a nominal cost. Read the following thoughtfully, and act at once.

The offer figures out as follows:

Review of Reviews, Regular Price $3.00
McClure's Magazine " 1.50
Woman's Home Comp'n " 1.50
Medical Missionary " .75

Total, $6.50

OUR PRICE
For the Combination is
Only $3.60

We will quote special prices for either of these periodicals, including MEDICAL MISSIONARY, to those who desire a portion of the combination. But we recommend the set of four splendid periodicals.

Address the
MEDICAL MISSIONARY, Battle Creek, Mich.
THE AMERICAN MEDICAL MISSIONARY COLLEGE

The American Medical Missionary College offers excellent advantages to those who desire to prepare themselves for work in Medical Missionary fields at home and abroad. Opportunity is afforded by this School for obtaining a thorough, practical Medical Education, and especially for attaining proficiency in the use of physiologic remedies.

This School has a large missionary dispensary in Chicago which treats several thousand people annually, and also enjoys the clinical advantages of several of the largest hospitals of Chicago with which members of the faculty are connected. The affiliation of the School with the Battle Creek Sanitarium enables students to obtain a large practical experience as laboratory and office assistants and in caring for the sick. Compensation is sufficient to enable apt students to pay a large part of their current expenses.

As the number of students who can be received is limited, application should be made at once.

For catalogue and full information address R. H. Harris, M. D., Battle Creek, Mich.
KATHARMON
KA-THAR-MON

A
NON-POISONOUS
DISINFECTANT, ANTISEPTIC, DEODORANT
AND
PARASITICIDE

PECULIARLY VALUABLE IN DISEASES OF
MUCOUS SURFACES

The Value of Katharmon is Readily Understood When the Physiologic Effects of its Constituents are Borne in Mind

Katharmon represents in combination Hydrastis Canadensis, Thymus Vulgaris, Mentha Arvensis, Phytolacca Decandra, 10½ grains Acid Borosalicylic, 24 grains Sodium Pyroborate to each fluid ounce of Pure Distilled Extract of Witch Hazel.

A Sixteen-ounce Bottle to Physicians who will Pay Express Charges

Katharmon Chemical Company
Saint Louis, Mo.