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 formulas 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. 50 CHAPTERS,
25 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.
EDITORIAL

In the January number of this journal mention was made, in connection with the sketch of American Medical Missionaries, of Dr. Jacob Chamberlain as the then living veteran of the cause of medical missions in India.

There was some uncertainty as to his being alive when the article referred to was written, but he was yet on earth and may have just seen the reference made to himself in the sketch of his veteran predecessor, Dr. John Scudder, ere he was "called home" on March second.

It was a great privilege of the writer's to have known Dr. Chamberlain for a quarter of a century, and in 1894 to have crossed the Atlantic with him on his return to New York at that time.

It is with peculiar pleasure therefore that the able sketch of Dr. Chamberlain's career and life work is inserted in these pages. It is a wonderful privilege—we know of none greater, or as great—to be permitted to labor in this sin-stricken, sorrowing world, relieving its pains of body and mind, and pointing the sufferers to the Great Physician for sin-sick souls, and telling them of "the beautiful place he has gone to prepare,"—where there shall be "no more pain," and where "God shall wipe away all tears from the eyes."

This was the privilege—thoroughly enjoyed, too—of our lamented friend for nearly half a century.

The accompanying sketch by Rev. H. N. Cobb, D. D., Secretary of the Reformed church, which Dr. Chamberlain served for so many years, is written by one who knew him long and well and esteemed him highly indeed for "his works' sake."

During the past month it has been our privilege to welcome at Battle Creek medical missionaries from four mission fields and have them give the benefit of their years of experience to the students of the Medical Missionary College by personal conversation and talks and lectures. Those referred to are Dr. Frank Van Allen of India, Dr. A. M. Sharrocks, of Korea, Dr. Royal J. Dye, of Bolenge, Kongo, Africa; and Dr. Emily D. Smith, of Foochow, China. The opportunity to thus come into close touch with these veterans from the various fields is invaluable to prospective medical missionaries, as in this way they can obtain knowledge which they could not get by any other means.

On the other hand, the medical missionaries, whether on furlough or preparing to go out for the first time, have many valuable advantages and opportunities to learn methods of research and bacteriological and pathological investigation while staying at Battle Creek, in addition to observing modes of treatment of different kinds.

Electrical treatments of various sorts are used, also Swedish vibratory movements, massage, etc. Further, they can witness and assist in the various surgical operations, gastric, intestinal, uterine, also eye, ear, nose, and throat. To all of these opportunities medical missionaries are welcome, the only cost being five dollars a week for room and board.

A matter of peculiar interest at the present time is the presence at Bat-
tle Creek of a native young man from the Bolenge church on the Kongo, brought to the United States by Dr. Dye for two or three reasons. The doctor needs his aid in the work of translation, and further desires that he learn something of printing and be useful to him on their return to the Kongo.

The young man referred to has been and is under Dr. Dye's care and treatment for sleeping sickness, of which disease he has developed the early symptoms, and the parasite of the disease can be found, after patient research, in his blood. His presence here affords an excellent opportunity for studying this peculiar disease, for which no absolute remedy has as yet been found. Dr. Dye, however, had marked success in treating the wife of one of the veteran Kongo missionaries last year, the case being a bad one of distinctly pronounced type and admitting of no question. Arsenic was the chief remedy used by Dr. Dye.

The question of self-support and extension of gospel effort has been solved by Dr. Dye of Bolenge on the Kongo, in a manner and on a plan the most simple and successful of any that we have yet heard of. Among the more than four hundred members of the Bolenge church, the tithing system is made an article of membership, the result being that every tenth man can be and is supported by nine others, and in this way all share alike.

More than forty native evangelists are in this way at work among the various tribes and people for a radius of a hundred or more miles around Bolenge.

This is the most practical solution of the problem of "evangelizing the world in this generation," at least as far as it relates to native agency, which must of necessity be largely employed in its accomplishment. The application of this principle to our home churches, or only one tenth of it, would provide for one per cent of our young men to be supported by the ninety and nine, and would multiply the present small force possibly a hundred times.

In the present issue will be found the balance of the article, Healing around the World, the first part of which appeared in the January number of this journal. The whole of the article was "set up" for issuance in January, but the publishers of The World's Work declined to grant permission for more than one-third of the article to be copied at that time. They have now generously granted permission for it to be printed in full and in pamphlet form also, and although it might seem too late now to insert the balance of the article referred to, its character and worth are such as to warrant it, both as an inspiration and encouragement to our medical missionaries, and as affording valuable information to the Christian young people of the country.

Last month the address delivered by Dr. John J. Mullowney was omitted for lack of space, but is printed in the present number. It is full of interesting data and burning, earnest words from the heart of one whose life has been consecrated to the glorious work for which he pleads.

It is to be hoped that many of the young people of our land will have their hearts touched and be led to offer themselves for medical mission service. We await any word from such and stand ready to help them.

A prize of one thousand dollars is offered by Messrs. Morgan and Scott, the publishers of The Christian, in London, England, for The Best Essay on Foreign Missions, "in the hope," as they say, "that it may promote interest in Christ's great commission to preach the gospel to every creature." Any one desiring to compete can address Messrs. Morgan and Scott, 12 Paternoster Buildings, London, England.

This certainly is a grand offer and ought to be, as no doubt it will be, productive of hearty response and
many able essays. The offer, too, is most timely as befitting the present time of varied new societies, such as the Forward movement, the Laymen's movement, etc.

The group picture of missionaries at Battle Creek, inserted on another page, will be of interest to all of our readers, but especially so to our friends on the various mission fields, who will recognize some of their fellow-workers; while others will see for the first time those of whom they have only heard before.

It is a most representative group as regards the various mission fields and the different denominations and societies.

The following countries are represented, by those who have seen actual service in India, China, Africa, Japan, Turkey, Siam, Chili, and Venezuela.

The following denominations are represented in the group picture: A. B. C. F. M., or Congregational Board; American Baptist Missionary Union; Southern Baptist Convention; Methodist Episcopal Church (North); Presbyterian Missionary Society (North); Canadian Methodist Missionary Society; Free Baptist Missionary Society; Church of Disciples Missionary Society; and the Seventh-Day Adventist Church. Thus no less than nine societies or churches, representing eight of the principal mission fields, have been brought together at the Sanitarium at Battle Creek to their mutual pleasure and profit, and have been, as they all state, much benefited by their stay and care.

When a bit of sunshine hits ye,  
After passing of a cloud;  
When a bit of laughter gets ye,  
An' yer spine is feeling proud;  
Don't forget to up and fling it  
At a soul that's feeling blue;  
For the minnit that ye fling it,  
It's a boomerang to you.  
—Captain Jack Crawford.

MORE MEDICAL MISSIONARIES NEEDED

Nearly all of the various missionary societies are anxiously looking for men and women physicians ready and willing to devote their lives to mission service, and in those instances which form exceptions to this condition, there seems invariably to be “lack of funds,” actual or prospective.

In the case of the Presbyterian church (North) the Board is anxious to send out the following during 1908:—

A woman physician to Tabriz, Persia.  
A skilful male surgeon to Tabriz, Persia.  
A male physician for itinerating in Persia.  
A woman physician for Urumiah in Persia.  
Three male physicians needed for Korea.  
Four women and several male doctors for China.

Mr. Robert E. Speer, in sending the above statements, significantly adds, “Great as is the need for new missionaries, there is even greater need for the fuller support of the missionaries we have, to provide them with more adequate salaries and increase our appropriations to supply the needed means.” We will be glad to hear of any who may respond to his appeal.

SEVEN SONS OF DR. JOHN SCUDDER

It was a matter of regret when writing up the article regarding American Medical Missions which appeared in the January issue, not to be able to name Dr. Scudder's seven sons. His granddaughter, Dr. Ida Scudder, now on furlough, has kindly supplied them, as follows:

Rev. Henry M. Scudder, M. D., D. D.  
Rev. William W. Scudder, D. D.  
Rev. Joseph Scudder, D. D.  
Rev. Ezekiel C. Scudder, M. D., D. D.  
Rev. Jared W. Scudder, M. D., D. D.  
Rev. Silas D. Scudder, M. D.  
Rev. John Scudder, M. D., D. D.

A truly magnificent array, and, as far as we are aware, without a parallel in mission history.
FROM SAVAGE TO SAINT

At Baringo we are in the morning of the kingdom of God, and in the rosy light of that new day we can re-echo the words of that ardent missionary who declared: "I am not ashamed of the gospel of Christ, for it is the power of God unto salvation." Listen to the story of one who has come under the spell of that power—

A VERITABLE SAVAGE

when we saw him first. Around his waist was the skin of a wild cat; in his hand a knife; sprinkled over his body, red camwood powder; on his face, every line that sin, ferocity, and lust could write. It was thus he first came to the station, seeking the help of the missionary

TO CURE A POISONED HAND.

Having been treated, he was invited to remain, and listened with wondering eyes and heart to the story of the love of God. As time went on, we saw the power at work within that man. The old savage look began to pass away; new habits were embraced; new desires expressed; until the man who had once stood as the incarnation of all evil, knelt down to plead that he might have the elengi of Jesus Christ.

To-day we know that prayer was heard—there is a way from the dark forests of Central Africa up to the throne of God and he found it.

We have watched him under circumstances of trial—we have seen him seek to win his wife. No husband ever prayed more earnestly than he has done, and yet, instead of turning to his Saviour, she has only given herself more and more to evil, until she has even outraged the heathen sense of propriety. The days were when he would have thrashed her or treated her worse than any beast; but now, with a new-born gentleness, he seeks to commend to her the gospel of the grace of God.

NOR IS THIS ALL.

We see him now in his spare hours going away to his old town and seeking out his old comrades, not to discuss palavers, but to tell them of the love of Jesus Christ, and to reveal him by his own transformed life. No other power could have worked this change; no other power could have turned this cannibal, once reveling in fighting, savagery, and sin, into a humble, kindly, truthful man.—Rev. J. Padfield.

OUR NEEDS ON THE KONGO

REV. E. T. WELLES, OF LUKUNGA

First of all, we need God. If there is any prayer that ought to rise unceasingly from our hearts for this bleeding land, it is for God to work.

We need him in the power and the fire of the Holy Spirit from heaven. Far too many of our Christians are slothful, indifferent, conformed to this world, often denying our Lord, more interested in their food and raiment than in the house of God.

Secondly, We need men,—men strong of body, strong and patient in heart, who shall be able to teach. I may be mistaken, but I am of the opinion that instruction in the art of teaching is better equipment for this field now than stores of knowledge.

How many men? At the least, such a number that no one need ever be left alone; and no station left with no one to guide and teach and heal.

How many? I can not count it less than seven for our immediately pressing need, yet only one has come. We are, all told, three more now than ten years ago, with one more station, leaving us no better manned than we were then. During those years God has given us thousands of "children" to train for him, but no more help has come to train them. We have been able to raise only one forward step, while beyond are the vast untouched regions lying in the darkness of the evil one and under the curse of inhuman greed. We need a host to press forward and take the land for Jesus.

Wouldst thou lead a happy life—To others happiness impart; The happiness that we bestow, Returns to dwell within the heart. —Calm.
MISSIONARY DEPARTMENT

REV. JACOB CHAMBERLAIN,
M. D., D. D., LL. D.
HENRY N. COBB, D. D.

To how many the tidings of the death of this honored and devoted servant of “Christ and India” has and will come with a sense of personal loss it is impossible to estimate. They will be found made his name almost a household word. The bringing of Christ to India and of India to Christ may be said to have been, for half a century, the passion of his life. “Yours for Christ and India,” was the favorite conclusion of his letters, familiar to those whose privilege it was to be in frequent correspondence with him. And now that he

by hundreds and thousands in this country, far beyond the bounds of our own denomination; in India, to which for Christ’s sake and its evangelization so large a portion of his life was given; and throughout the Christian world, to which his work and his writings have has gone to meet the Lord whom he so long and faithfully served, his work will still go on, and the day of India’s evangelization be all the nearer because he lived and loved and wrought for it and because his work abides.

357
Dr. Chamberlain, as might easily be supposed, came of godly ancestry on both sides. His father's and mother's ancestors came over to join the Massachusetts colony of the Pilgrims about 1650-1670. Among their descendants eighteen were ministers or ministers' wives.

His parents, Jacob and Anna Nutting Chamberlain, lived in Sharon, Conn., until 1838, when they removed to Hudson, Ohio. There in Sharon their son Jacob was born on April 13, 1835. The father, according to the testimony of his son, was a man of strong faith and active Christian character. He had been a consistent member of the church for seventy years, thirty-one in the church at Hudson, Ohio. He was always one of the active working members, and according to his means one of the most liberal supporters of the gospel at home and abroad. He died in 1878, aged eighty-six. His mother died in 1861.

After his ordination and his passage had been engaged for India, his mother informed him that at his birth she had consecrated him to the Lord in a holy vow for the missionary work, and that her first act on rising from her bed was to take him away by herself into her closet, and, kneeling, repeat the vow and ask the Lord to make him a missionary to the heathen. She had never mentioned this to him before, as she wished the act of personal consecration to be voluntary on his part. But she had never faltered in her faith during the twenty-four years of study and preparation, nor ceased to pray that he might be led to give himself to missionary work. His father's house was always a missionaries' home, and many of his cousins and personal friends were missionaries. Yet up to thirteen years of age he had cherished the hope and expectation of remaining on the farm and making a home for his parents. In fact, he began preparing for college, intending to become a scientific farmer. About that time a series of what he regarded as special providences led him to consider his personal duty and finally to decide that he should become a missionary.

He entered the Western Reserve College in 1851, but having overstudied and broken down, remained at home for one year, 1852-3, working on the farm. His health regained, he returned to college and was graduated in 1856. In September of that year he entered Union Seminary, where he remained only about a month. Being dissatisfied with the Hebrew course, he changed to New Brunswick to be under the influence of Dr. Campbell, and was graduated from there in 1859. His medical studies were pursued chiefly in the College of Physicians and Surgeons in New York, but he received his degree of M. D. from the Western University Medical College at Cleveland, Ohio. The degrees of D. D. and LL. D. were conferred on him by several colleges in later years.

In 1858 he applied to the Board of Foreign Missions for appointment to India, and was accepted with a view to work in that country. Early in 1859 he received a letter from a friend which tended to divert his thoughts from India to Japan, and at one time it seemed possible that he might be sent to that newly opening field. The offers of Dr. S. R. Brown, Guido F. Verbeck, and Dr. Simmons for Japan, however, having been received, the board reverted to its original designation, and in 1859 he sailed for India. From that time on, his name has been indissolubly associated with India and with our Arcot Mission, especially with the Telugu portion of the field to which he was early assigned. First stationed at Palmaner, he made Madanapalle his station from 1863 to 1901. Since then his home has been in the cooler climate of Coonoor on the Nilgiri Hills.

In 1863 he made that long journey through the native state of Hyderabad where no missionary had ever been before. Some of the most thrilling experiences of the journey are embodied in leaflets and in chapters of his books, "In the Tiger Jungle" and "The Cobra's Den." To the work of winning the confidence of the Telugus and bringing the tidings of the gospel to them he devoted himself with signal ability and unwear-
ied assiduity, by his medical and surgical knowledge and skill, by establishing hospitals, as well as by the preaching of the gospel, never sparing himself if in any way the work of the Lord with which he was trusted might be advanced.

More than once the mission, burdened with the weight of responsibility too great for its relatively feeble force, recommended to the board that that portion of the field be given up in order that the Tamil portion might be the more efficiently worked and more speedily evangelized. To this he never would consent. It is largely due to his personal representations and influence that the Telugu field still remains under the care of Arcot Mission. Once, when it seemed likely that the board would listen to the representations of the mission, he said to me, “The board may abandon the field. In that case I shall offer myself to some other society which will undertake the work. Should I not succeed in finding such a society, I shall return to India and support myself, and labor there to the best of my ability, for I am determined, God willing, to live and die among my Telugu people.”

Four times he revisited this country. In 1874, returning with his family via the Holy Land, where with a party of congenial and scholarly friends he made an exhaustive study of the Sinaitic Peninsula and other portions of Palestine with a view to qualifying himself the better for the work which was even then taking shape in his mind,—the production of a Bible dictionary for the Telugus.

He came again in 1884, when he was instrumental in raising the endowment for the Theological Seminary, the first endowment of the kind in India.

His next visit was in 1894, when he remained at home two years in the effort to recover health, and for the last time in 1899, when he attended the Ecumenical Conference of 1900 in New York and made his thrilling address as the representative of the missionaries there assembled and those on the field.

Both at home and abroad his labors were constantly performed under the pressure of ill-health, impaired by reason of the journey in Hyderabad, above referred to. The fever then contracted he was never able wholly to shake off. His unfailing industry, his cheerful spirit, his genial humor, always bubbling over, the elasticity with which he rallied from the attacks upon his health and strength, were marvelous. No one who has ever listened to his addresses, especially during his earlier furloughs, will ever forget the clearness of statement, the earnestness of appeal, the fertility and aptness of illustration which characterized them, convulsing at times even the General Synod with merriment and again almost melting it to tears. The desire to hear him was constant and universal. To protect him from demands entirely beyond his strength, but never beyond his willingness, was often no easy task.

His name became known throughout the Church universal, and perhaps no figures were more marked and noticed in that great missionary congregation of 1900 than those of Jacob Chamberlain and John G. Paton. Throughout all India he was recognized as one of the leading missionaries in that country. As one who has recently visited India has said since his death, “I heard his fame spoken of all over Southern India, and I did not hear one single reference to him that was not highly appreciative of his splendid qualities of mind and heart and of the admirably successful work which he did during his long period of service in connection with your board.”

It is not necessary to specify the numerous leaflets and pamphlets that proceeded from his pen, all of them based on personal experiences and enforcing some important lesson, and most of them still in active demand. They have been sought for and reprinted by missionary societies throughout the country, and his books, “In the Tiger Jungle” and “The Cobra’s Den,” have had a wide circulation. At one of the conferences of officers and representatives of missionary societies it was
stated that a gentleman in Chicago, who had previously been skeptical as to the value of mission work, had been convinced by reading "In the Tiger Jungle," and had purchased a number of copies for the purpose of placing them in the hands of others who had shared his former views, in order that they might come to see what missionary work really was and to become as interested in it as he was himself.

In 1902, it will be remembered, Dr. Chamberlain was suddenly stricken by a stroke of paralysis. For weeks and even months his life hung in the balance, and his recovery was not only extremely uncertain, but practically despaired of. God graciously restored him and gave him such a measure of strength as enabled him to labor in moderation upon the work which had long lain on his heart, the Telugu Bible dictionary. He was privileged to bring out and see in print the first part or quarter of his work. It was his earnest desire and hope that his life might be prolonged sufficiently to enable him to complete it and leave it as a legacy to his beloved Telugus. But it was not to be. The weary brain was overtaxed. Last fall it seemed to his physicians that he should give up all work of every sort, leave his home in Coonoor and come down to the plains. Physicians were baffled by his symptoms. Remaining for a while at Vellore under the constant watch of doctors who loved him, he went at last to the station which he had founded and the home which he had built for himself and family at Madanapalle, and there, at length, on Monday, March 2, he passed away. It was doubtless as he would have had it, and among his Telugu people he will sleep well till the morning of the resurrection.

Having been privileged for nearly a generation to possess the warm and brotherly affection of such a man, to be for long years in close and intimate correspondence with him,—and to be twice for periods of several days within the sacred circle of his India home, I find it difficult to express my appreciation and admiration of his ability and character, of his devotion to the Master, and of those graces which made him so loving, so genial, so helpful, so attractive a friend.

Many will sorrow both here and in India that they shall see his face no more. A full tide of sympathy will flow toward those who have been most sorely bereaved in his departure—his sons and daughters, and most of all to her who has walked with him and been his guardian angel all these years. Yet all may rejoice in the memory and heritage of such a life made lustrous by the grace of God and the purpose that filled it to its close.—The Christian Intelligencer.

"O, HOW WE NEED A WOMAN DOCTOR"

Such is the language used by Dr. Thoms, the medical missionary at Bahrein, Arabia, to express the crying need for help at that place. May some noble-hearted Christian woman be led to respond. The doctor goes on to say: "We have an average of fifty men and twenty-five women daily in attendance at our dispensary department, and the men's wards have been full and overflowing. If we only had a capable woman doctor, there would soon be more women than men. And this in a place where the people are largely Mohammedan and so inaccessible to any gospel effort.

"Truly, in medical aid we have the key to the situation which will open hearts to hear and accept the gospel of Christ."

The doctor further explains their manner of working as follows: "The crowds gather in the morning and we read from the Bible and explain the passages, followed by prayer for the blessing of God and his help in caring for the sick. After this we go on seeing the patients one by one after the usual manner, and turn them over to the dresser, or pharmacist, as necessary.

"In this way the forenoon passes, the rest of the day being given to operations, calls at the homes, etc. We have had a number of Bedouins from the in-
terior with gunshot wounds received many months before.

"These remain about a month, during which time we give them instruction in Christian truth, which they carry back with them to the interior, where we have not been able to penetrate.

"Plague broke out here last year in April and continued until July, during which time it was estimated that over two thousand died.

"In a Hindu community of fifty, twenty died. Among the Christians, numbering sixty, only two were attacked and both recovered. Meantime our workmen fled and so stopped all work from May until July, but work is now progressing again."

SAN PEDRO (N. W. ARGENTINA) MISSION TO THE INDIANS

Two days ago while speaking in Spanish, I saw the tears glisten in the eyes of a Chiriguano Indian, who with his wife and child had walked two miles and got soaking wet, carrying a little baby too, longing to know more about that "same Jesus." While they listened, I gave them a nice warm, dry cloth to wrap the baby in. After service, and the rest had gone home, we sat and talked, and this man who has seen through the errors of Rome, and LEARNED TO STAY HIS WHOLE SOUL on that "same Jesus," told me he ought to go back to Bolivia, and preach the gospel among his own people, and he and his wife began to name a number of old acquaintances, who they thought would be ready to hear the good news.

Another big fine-looking Indian man has, as far as one can judge by life and profession, crossed over into light and life. Alfonzo has not been a drunkard as Casimiro (the first mentioned) was, and he has not been taught so long. He is a tall, clean-faced man, always tidily-dressed, and a very quiet, big man. He speaks less Spanish, but he has been reading the Bible a long time, and Casimiro and his wife Efigenia have been teaching and helping him.

There is still another short, cannie, little chap, a middle-aged man, simple-minded and sincere, who has evidently yielded to the truth in a great measure.

To-day I have been cleaning out a woman's hollow tooth, and then putting in a little carbolic acid

TO SEE IF I COULD CURE IT so that she could get some sleep. Last night another woman came, and I pulled one for her. This morning a neighboring blacksmith brought a woman whose husband is ill with rheumatism; she also needed medicine. So pass the days. I am alone, you see, having a native boy of about thirteen years with me. He is a weakly bit of a chap, who would, I think, have died some time since but for the food and medicine we have given him. I often have to prepare a meal for two or three visitors, who drop in about half an hour before dinner or teatime.

Sometimes I feel as if it would be nice to have done with all these so-called "LOWLY TASKS;" but then one enters at once into the clergy class, and those who hear one preach, say, "Ah well, you live by your preaching, but if you were as we" . . . !

Indians are like children, and like English people too, they learn more quickly through the eye than through the ear. To take their photo is a wonder to them. They laugh and exclaim, "Did you put that on there?" To explain the form of the earth and many natural things is a revelation. And then to preach the gospel! But let them see you get them a meal ready with your own hands, talking with them all the time, and then ask them to the table, and serve them, after giving thanks,— now you have got near them, and there is a feeling that you belong to one another, and a great deal of affection and confidence is won. — JOHN LINTON.

Is this not just what Jesus did for the hungry tired fishermen, even after his resurrection, when he lit the fire and prepared breakfast with his own hands.
MISSIONARIES AT BATTLE CREEK

The picture of the group of missionaries on the opposite page is full of interest in many ways, but chiefly, perhaps, in its representative character, for truly "the ends of the earth" seem to have been thus brought together.

Quite as many more missionaries as are in the group picture have visited the Sanitarium during the eight months ending April 30th.

A list of these is appended.

The personnel of the group is made up as follows, reading from left to right:

On the bottom, or front row, seated on the floor, are six children of missionaries:

1. Miss Florence Newell, whose parents are missionaries of the A. B. C. F. M. in Japan.
2. Mrs. H. M. McCandliss, whose husband is Presbyterian medical missionary in Hainan, China, and whose father was the esteemed Dr. John G. Kerr, of world-wide fame, who went to China in 1854 and served there until he died in 1901, or forty-seven years.
3. Mr. E. L. Merritt, son of Dr. C. P. W. Merritt, medical missionary for many years under the A. B. C. F. M. in China, the son being now engaged as gospel singer in evangelistic work.
4. Miss Mabel Woodside, whose parents are missionaries of the A. B. C. F. M. in W. C. Africa, Miss Woodside being now a student of the American Medical Missionary College, having been graduated from Oberlin College in 1907.
5. Miss Marion F. Dowkontt, youngest daughter of Dr. G. D. Dowkontt.
6. Mrs. I. L. Stone, nee Phillips, whose parents were missionaries in India, where she was born, and where she served as missionary for some twenty-five years. Mrs. Stone is now a resident of Battle Creek city, and, with her husband, Mr. I. L. Stone, is pleased to show hospitality to the missionaries in their beautiful home.

The eight persons in the second row are:

1. Mrs. Nathan Maynard, whose husband and herself are missionaries to Japan, under the Southern Baptist Convention.
3. Miss Gwenn Griffiths, of the Girls' College in Constantinople, under the A. B. C. F. M.
5. Mrs. T. W. Woodside, whose husband and herself are missionaries in the West Central African Mission of the A. B. C. F. M.
6. Miss Edith M. Buck, Presbyterian missionary to Laos, Siam.
7. Mrs. Sutherland, whose husband is the Rev. Alex. Sutherland, D. D., Secretary of the Canadian Methodist Missionary Society.
8. Mrs. R. S. Hambleton, whose husband was medical missionary in Tarsus, Turkey, accompanied by his wife. Those comprising the third row of twelve are:

1. Miss Emma A. Lyon, of the Church of Disciples Mission in Nanking, China.
2. Miss Caroline E. Chittenden, of the A. B. C. F. M. mission in Foochow, China.
3. Dr. Emily D. Smith, also of the A. B. C. F. M. mission near Foochow, China.
4. Rev. W. F. Wilson, missionary in Nanking, China, under the Methodist Episcopal Church.
5. Dr. J. H. Kellogg, Superintendent of the Battle Creek Sanitarium.
6. Miss Lucy E. Mayo, missionary to Japan, under the Presbyterian Board (North).
7. Rev. H. B. Boomer, missionary to Chili, also under the Presbyterian Board.
8. Mrs. Fanny E. Dowkontt, wife of Dr. G. D. Dowkontt.
9. Miss Alice Seager, formerly missionary in Venezuela, now medical missionary student.
10. Mrs. S. S. White, herself and husband missionaries to Japan under the A. B. C. F. M.
11. Rev. William A. Axling, missionary to Japan under the Baptist Missionary Union.

The remaining four, comprising the back row, are:

1. Dr. George D. Dowkontt, Editor, The Medical Missionary.
2. Rev. M. C. Wilcox, Ph. D., missionary to China of the Methodist Episcopal Church.
4. Editor George C. Tenney, of The Medical Missionary.

The total number of persons in the group is thirty, of whom twenty-two have served on the foreign field, including three children who have resided with their parents in Africa, China, and Japan.
GROUP OF MISSIONARIES AT BATTLE CREEK SANITARIUM—Taken in the Palm Garden, April, 1908
The following additional missionaries have been in the Sanitarium during the past eight months:

1. Dr. and Mrs. Frank Van Allen, Madura, India, under the A. B. C. F. M.
2. Dr. Royal J. Dye, of Bolenge, Kongo, under the Church of Disciples.
3. Rev. Joseph Clark, of the Kongo, under the Baptist Missionary Union.
5. Miss Ella Case, A. B. C. F. M. missionary to Japan.
6. Mrs. W. W. Chew, Methodist missionary to India.
7. Rev. H. E. Hopkins, Baptist missionary to India.
8. Rev. Lewis E. Linzell, Methodist missionary to India.
10. Rev. Benjamin Chappell, Methodist missionary to Japan.
11. Miss H. S. Alling, Methodist missionary to Japan.
12. Mrs. William Axling, Baptist missionary to Japan.
13. Dr. A. M. Sharrocks, wife, and two children, Presbyterian medical missionary in Korea.
14. Mrs. Giles G. Brown, whose husband is principal of Jaffna College, Ceylon.
15. Mrs. Spencer Walton, South Africa General Mission.
16. Miss Reingold, South Africa General Mission.
18. Mrs. A. W. Cooper and daughter, Presbyterian missionary with her husband in Siam.

Counting Mrs. Van Allen and Mrs. Sharrocks and her two children, also the daughter of Mrs. Cooper, makes a total of twenty adults and three children. By adding the name of Mrs. Lydia M. Campbell, formerly a Baptist missionary in India, at present at the Sanitarium, but not well enough to be in the group, brings out the somewhat singular coincidence that exactly the same number of adults and children were in the Sanitarium when the picture was taken as had been here and left since September 1st, i.e., twenty adults and three children in each case, making the total of forty-six persons, all of whom had been on some foreign mission field.

The presence of such a large and representative body of missionaries has been a constant inspiration to everybody connected with the Sanitarium, whether as guests, members of the staff, or nurses, students and helpers.

The Sanitarium management esteem it a great pleasure and a privilege to enjoy the association of the splendid men and women who have so lavishly given their talents and their energies for the spreading of the gospel light in the dark corners of the earth. The doors of the institution stand open at all times to welcome and aid these servants of God and benefactors of their race.

ADDITIONAL LIST OF MEDICAL MISSIONARIES FROM THE UNITED STATES AND CANADA

THE CANADIAN METHODIST MISSIONARY SOCIETY

Dr. F. F. Allan, Chentu Sz Chuan, China.
Dr. James Cox, Ren Shou, Sz Chuan, China.
Dr. Wallace Crawford, Chentu, Sz Chuan, China.
Dr. R. R. Ewan, Chentu, Sz Shuan, China.
Dr. O. L. Kilborn, Chentu, Sz Chuan, China.
Dr. W. E. Smith, Yuin Hsien, Sz Chuan, China.
Dr. C. W. Service, Kiating, Sz Chuan.
Dr. W. J. Sheridan, Chentu, Sz Chuan.

“Thank God for the man who is cheerful
In spite of life’s troubles, I say;
Who sings of a bright to-morrow,
Because of the clouds of to-day.
His life is a beautiful sermon,
And this is the lesson to me,—
Meet trials with smiles and they vanish;
Face cares with a song and they flee.”
IN FAR SHANSI

SECRETARY JAMES L. BARTON, D. D.

A. B. C. F. M.

This province of Shansi is upon the opposite meridian from Massachusetts. It lies as far east or as far west from Boston as one can well go. The mission is entirely within the bounds of the province of Shansi, although it does not cover the province. The other missions working here are China Inland Mission and the English Baptists. The province itself has an area of 81,830 square miles, between one-third and one-half larger than the State of Illinois, and contains a population of 12,200,000, over three times the population of Illinois. We occupy the two stations of Tai-ku and Fen-cho-fu, located toward the southern section of the district, and nearly sixty miles apart. These two stations may be regarded as the two centers of an ellipse which includes the field of the American Board in this part of China.

Our mission was opened here twenty-four years ago as the direct outgrowth of a new missionary movement in Oberlin College led by the late Secretary, Dr. Judson Smith. In the Boxer days of 1900 every missionary and every missionary child in the mission at that time was cruelly murdered, and many Chinese Christians were martyred. I have stood upon the two places where this awful deed was committed, one in the old mission compound in Tai-ku, and the other

THE MARTYRS' MONUMENT AT FEN-CHO-FU, SHANSI

Erected by the government near the spot where the missionaries were killed by the Chinese troops

*From The Missionary Herald.
on the road this side of Fen-cho-fu near the village of Nan-Kai-Shih. I wish every pastor in the Congregational churches of the United States could have stood with me upon these hallowed spots.

**These places are sacred** because they have been bathed in the blood of men and women who counted their lives not dear unto themselves. One instinctively asks if from the ashes of their ruined homes and from the blood they so readily gave there is to spring in this district a new and glorified Christian society. Is this poured-out blood to be the seed of the true Church of Christ for this people? We see no little evidence that this is to be the case. I have attended services in two chapels in this city of Tai-ku and one in the city of Fen-cho-fu, and in each instance the capacity of the room was taxed to accommodate the people. The missionaries tell of overcrowded chapels, and they are already planning to enlarge.

Close by the hallowed martyr ground in Tai-ku last Sunday night twelve men rose to their feet as an expression of their desire to lead the Christian life. For a long time they stood before that house packed with men from the city and answered searching questions as to their purpose.

The missionary force now upon the ground, upon whose shoulders rests the burden—or shall we say the privilege—of accomplishing this mighty task, consists of three families and one single woman; Dr. and Mrs. Atwood are alone, at Fen-cho-fu, the only missionaries in that important city, surrounded by over 100,000 souls in the immediate vicinity. While the doctor is an ordained man, he has also an extensive medical work for both men and women, with a hospital for each class and an opium refuge and a church in the mission compound, besides a chapel in the center of the city. Never did a man have a more promising field, with the church packed with Christians and hearers, and the medical demands constant.

Outside of the city of Fen-cho-fu, in the populous villages and walled cities, Dr. Atwood has a multitude of acquaintances who have been in his hospital and who welcome him as a true friend. The hospital has opened the door on every side.

At Tai-ku there are two families, Dr. and Mrs. Hemingway and Mr. and Mrs. Corbin, and one single woman, Miss Heebner. When one looks at the work already in operation and the waiting field on every side, he is led to exclaim, "What are these among so many?"

The two hospitals, one for men and one for women, and the nine opium refuges in the city and in other towns are sufficient to keep one physician busy; while the girls' boarding school, station classes here, as at Fen-cho-fu, a boys' boarding school, two churches or chapels here, and several outstations, besides the other multitudinous duties and privileges of a missionary, are more than can well be looked after by one family and one woman. This allows no provision for enlargement of the work in places ready to welcome the preacher of the gospel, or to open Christian schools in villages where boys could be gathered in for such training. In all this mission there is only one ordained man who is free to give himself wholly to the direct work of evangelization, and his parish includes 1,500,000 souls. If there are young men in the United States who wish a large field for their future life work, this is a place for them. There is no crowding here. Do not misunderstand me.

The medical work is directly evangelistic as is also the school work, but it needs to be followed up by organized effort.

A few years ago missionaries and Chinese Christians were hunted like savage beasts and stricken down when captured. Now they are not only free to go and come as they please, but they are welcomed and eagerly listened to and even shown special honors. The persecutions have called attention to Christianity, and have shown a religion that
WOULD NOT ATTEMPT TO TAKE VENGEANCE upon those who so cruelly treated its followers. A Chinese pastor recently told me that the Chinese marvel at the forgiving character of Christianity, and have thus been turned from persecutors into willing hearers. The massacres have in a large way opened Shansi to the gospel. The lives of the 159 missionaries and their children taken in this province in 1900 have not been laid down in vain. This blood is the seed of the future church of Christian Shansi if only the churches of Christendom are ready to water the soil and gather in the harvest.

This interior province has no modern practitioners of medicine except the missionaries. The people respond quickly to the influences cast about them in the missionary hospital. Dr. Hemingway reached last year OVER ONE THOUSAND different persons through his medical practice, and with each one made a personal friend, and in many cases a circle of friends. These patients scatter to their homes and tell to their neighbors what they have seen, experienced, and heard. The medical work for both men and women, centering at the two stations of this mission, is sowing the seed of Christian truth broadcast, and some of it is already bearing fruit.

This province is one of the greatest opium producers and consumers in the empire. And here is THE CURSE OF SHANSI. The people realize this as do we. Many are trying to break away and free themselves, but the bondage is hard to cast off. But Drs. Atwood and Hemingway have opened refuges into which opium victims are received, and where in three or four weeks the appetite is taken away. In the Tai-ku station alone last year there were over three hundred men and women in these Christian refuges taking the treatment. The patients must necessarily be occupied while under treatment in order to keep their minds from their terrible cravings. Christian instruction is given, and they sing Christian hymns and learn to read Christian books. Some most earnest Christians have come out of these institutions, and are to-day devoted workers, clothed, and IN THEIR RIGHT MIND.

It is also most interesting that the patients themselves pay enough for their treatment to cover the expenses of the refuge.

The women of Shansi, when enlightened with Christian truth, show unusual ability and energy. I have seen in no Oriental land better native talent and ability in its women than I have seen in China, and Shansi is no exception. The future Christian workers, both men and women, must be discovered in the boarding schools.

I have just come from a Chinese feast spread by a CHRISTIAN DRUGGIST of this city of Tai-ku. Three wealthy non-Christian Chinese were present, two of them from important centers of population several miles away. Merchants from remote places drop into the city chapels and hear for the first time Christian truth and Christian hymns. Last Sunday evening here in Tai-ku I heard strangers singing the chorus of a Christian hymn which was frequently repeated.

This province was the seat of the early Chinese empire, and emperors have come from its stock. Shansi people travel over China, as the Cantonese go over the world. In a town at which we stopped for lunch upon our way to Fen-cho-fu this week, a native of the town introduced himself to Dr. Ament as a business man in Peking, home for the New Year's holidays, just now closing. One of the men with whom we dined to-day has business in various parts of the empire. If THE CURSE OF OPIUM can be thrown off, and there is hope that the government will be able to accomplish this with its new anti-opium laws, we have a right to expect that this province will be able to furnish some of the most bold and aggressive Christian leaders in China.
ARE FOREIGN MISSIONS JUSTIFIABLE?

WITH SPECIAL REFERENCE TO MEDICAL MISSIONS

Substance of an address delivered by Dr. J. J. Muldowney, under appointment to China.

There can be no nobler service than that to which the sincere earnest Christian missionary devotes himself—the elevation of the masses of mankind, by showing them that God is the only true object of worship and that loving obedience to him is the lever which lifts men to the highest plane of moral, spiritual, and intellectual life. If the work seems difficult, dangerous, and exhausting, involving more privations than most other kinds of noble employment, it is not done for a hard, exacting, and ungrateful Master, nor without its promise of reward. For Jesus Christ has said, "And every one who has forsaken houses, or brothers, or sisters, or father, or mother, or wife, or children, or lands, for my sake, shall receive an hundredfold and shall inherit everlasting life." Those who have gone out into strange lands to labor for the Kingdom of Christ, giving up opportunities at home, and putting off ambitions for honor in their own country, have found a career which is noble and satisfying. One who had received the highest honor which this great republic could bestow, gave this estimate of the cause to which the missionary devotes his life:

"The greatest conception that ever entered the mind of man is God as the Father of all men, the one blood, the universal brotherhood.

It was not evolved; it was revealed. The natural man lives for himself. God's ways are not his ways. He lays his imposts upon others. He buys his slaves that they may fan him to sleep, that they bring to him the jeweled cup, that they may dance before him, that they may die in the arena for his sport. Into such a world there came a King, not to be ministered unto, but to minister. The rough winds fanned his sleep, he drank of the mountain brook, and would not make the water wine for his own pleasure. He would not use his power to stay his own hunger, yet he had compassion on the multitude, whom he saw going about as sheep without a shepherd, and he fed them. Those whom he had bought with a great price he called no longer servants, but friends. He entered the bloody arena alone, and, dying, broke all chains, and brought immortality to light. Here, then, is the perfect altruism; here is the true appraisal of men.

Ornaments of gold and gems, silken robes, houses, lands, stocks, bonds, are but as chaff, as dust when men are weighed. Where else is there a scale so true? Where a brotherhood so wide and perfect? Labor is made noble; the King gives credit for the smallest service. No coin of love is low or base in his sight; he takes account of the percentage when tribute is brought into the treasury. The widow's mite he sets in his crown.

"For such a Master, good men and true have given up honor and country—yea, have died at the stake. For such a cause men have suffered privation and disease and death. In his name the Christian Church of America has been spending lives, energy, and money for over a century. For the evangelization of the world under the banner of such a King, young men and women in our colleges and universities are volunteering for service."

You will ask me whether the practical results of the efforts of the "century of missions" warrants the giving to it of so many lives, so much energy, and such large sums of money? I would reply, not in the words of a man prejudiced in favor of missions, not in the words of a young missionary enthusiast, not in the words of a great bishop, as I well might; I would give you the testimony of a man of unbiased judgment, of a clear, keen-headed business man, of a great statesman, of a man who received the greatest honor a nation could bestow upon him, a man whom all Methodism was proud to call her own, a loyal son and a devoted husband,—I would give you the words of one of the best presidents, at least from a moral
standpoint, that this country has had. I refer to William McKinley, who in New York City at the great Ecumenical Conference held there in 1900, spoke as follows:

"The services and sacrifices of missionaries for their fellow-men constitute one of the most glorious pages of the world's history. The missionary of whatever church or ecclesiastical body, who devotes himself to the service of the Master and of men, carrying the torch of enlightenment and truth, deserves the gratitude and support of all mankind. These noble, self-effacing, willing ministers of peace and good-will should be classed among the world's heroes.

"Wielding the sword of the spirit, they have conquered ignorance and prejudice. They have illuminated the darkness of idolatry and superstition with light of intelligence and truth. They have been the messengers of righteousness and love. They have braved diseases and dangers and death and in their exile they have suffered severe hardships, yet their noble spirits have never wavered. They count their labor no sacrifice. 'Away with the word and such a thought and view,' said David Livingston. 'It is emphatically no sacrifice; say rather, it is a privilege.' They furnish us with examples of forbearance and fortitude, with patience and unyielding purpose, with a spirit that triumphs not by the force of might, but by the persuasive majesty of right. They are placing in the hands of their brothers less fortunate than themselves, the keys which unlock the treasures of knowledge and open up the mind to nobler aspirations for better living. Who can estimate their value to the progress of nations? Their contribution to the onward and upward march of humanity is beyond calculation. They have inculcated industry and taught the various trades; they have promoted concord and amity; they have brought nations and races closer together. They have made man better. They have increased the regard for home and strengthened the sacred ties of family; they have made the community well ordered. And their work has been a potent influence in the development of law and in the establishment of government."

FOREIGN TESTIMONY

Do I hear some one say: "Yes, that is all very well, and it does seem as if from our viewpoint great results have been accomplished during the past century of missionary enterprise. But this is only the opinion, the judgment of a Christian man, of a Christian people. What is the testimony of representatives of nations to whom missionaries are sent?"

I reply by giving you the words of intelligent, unbiased representatives of a typical missionary country. In 1906 the Chinese government sent to this country a commission to study our laws and institutions, and these gentlemen said in New York City: "We take great pleasure this evening in bearing testimony to the part taken by American missionaries in promoting the progress of the Chinese people. They have borne western civilization to every nook and corner of the empire. They have undertaken the laborious task of translating into the Chinese language religious and scientific works of the West. They help us to bring happiness and comfort to the poor and the suffering by the establishment of schools, hospitals, and churches. The awakening of China which seems to be at hand may be traced in no small measure to the hands of the missionaries. And for all this service you will find China not ungrateful."

The missionary enterprises may be divided into three great phases or departments; namely, the Evangelistic, the Educational, and the Medical work. Though distinct, yet they are one, and the last named is often the pioneer of the other two. For whether the missionary preach, teach, or heal, his purpose is one and the same—to bring men and women to a knowledge of the one God and Father, and of His Son Jesus Christ the Saviour of mankind.

I want to speak more particularly about the medical work or lever of the mis-
sionary cause. And again I would give you the testimony of an unbiased judgment. I would give you the testimony of an earnest practical observer of the times,—Dr. W. W. Keen, professor of surgery at the Jefferson Medical College in Philadelphia, a man recognized in and out of his profession as one of the best surgeons this country has produced. Dr. Keen has said of the work of medical missionaries: "The value of medical missionaries both to the East and to the West is ALMOST IMPOSSIBLE TO STATE. They have alleviated the dreadful suffering of the natives by the introduction of anesthetics and of vaccination; by the introduction of a rational treatment of cholera; by the preventive inoculation against the plague; by the substitution of modern Occidental methods and drugs for the useless and nauseating mixtures of the Oriental; by the introduction of modern Western obstetrical aseptic methods for the cruelties and often fatal barbarities of the native midwives; by the introduction of modern surgical asepsis and many other beneficent services to suffering humanity.

"Moreover, the West owes much to the missionaries. We owe quinine, perhaps the one most useful drug of the whole pharmacopeia, to the Jesuit missionaries of South America, a fact perpetuated in the old name 'Jesuit Bark,' given to the powdered bark of the cinchona tree. Calabar bean, kola nut, and strophanthus we owe to that veteran African missionary, Dr. Nassau. Every one who reads carefully our medical journals knows the frequent and valuable papers by missionaries on cataract, lithotomy, leprosy, and many other tropical diseases."

Bishop Bashford has said: "Medical missions in China are a providential means of opening up new regions and fields to the gospel. The medical missionary follows the example of the Master in that he goes about healing and teaching the poor. The work combines the best features of practical Christian-ity and Christian humanitarianism, in that it seeks to relieve wretchedness and suffering in a land where

THE SUFFERING OF THE PEOPLE fills one everywhere with the deepest sympathy and compassion. Medical work is the most effectual means of overcoming prejudice, conquering hostility, and opening new doors to the gospel. Chinese Christians have been able to point hostile persons to man after man, woman after woman, and child after child, whose life has been saved by the medical missionary when they had been left and abandoned to death by the Chinese practitioners. And no Confucianist or Buddhist in China will speak against such humanitarian service."

In the Shantung Province the presiding elder went to one of the leading officials and said: "I have failed to receive certain money from the United States, and since it was to have been used for the relief of suffering and the establishment of a hospital among these your own people, perhaps you would like to help." He replied by saying, "Leave your subscription paper with me, and

I WILL RAISE THE MONEY. I am not a Christian, but we all believe in your medical work." And he raised every cent of it.

Again, a certain city of forty thousand inhabitants was exceedingly hostile to foreigners and would not allow a missionary to enter, until one day a woman who for years had been suffering from a terrible malady came to one of our hospitals. She was taken in and finally cured of her disease, and under the benign influence of the missionary physicians and nurses, she opened her heart to Christ. She was converted. She returned to her city and people and told of the healing that had come to her body and soul, with the result that the Methodist church has one of its most flourishing missions in that city to-day. Thus the medical missionary is the "John the Baptist" of the missionary enterprise.

But medical missionary work does not
only prepare the way for the gospel; it is directly evangelistic. In connection with every hospital and dispensary there is a chapel, where the patients, while waiting to be treated, hear why the missionary has come to China, why he has left home and country, learn of the love of Jesus Christ and of the hope of salvation which we have through him. Occasionally visits are made by the medical missionary to the homes of better classes of Chinese in the cities, and, as opportunity offers, trips are made into the outlying country districts, and the purpose and effort of one and all of these is to bring a knowledge of Jesus the Saviour of men to these people. As an instance of how the hospital is directly evangelistic, is the case of a man who came to our hospital at Kucheng. He was known as 

THE LEADER OF GAMBLING

and all sorts of vice in his city. He had lost his eyesight as a result of the diseases consequent upon his dissipations and debauches. He was admitted, and his eyesight was restored. Then an effort was made to have him repent of his evil ways and give his heart to God. He was converted, and has lived a most devout Christian life ever since, and although it has been only six or seven years since his conversion, hundreds have heard the gospel story from his lips.

Or another instance of a man, by the name of Shin, who, according to his own confession, had been hanging about the mission for years in the hopes of gaining some lucrative position in connection with the church. One night in that dark year of 1895, when cholera was so rife in China, and so many of her sons were carried off, he went into the hospital and there he saw the medical missionaries

WORKING AND WEEPING

over a poor wretched coolie whom they had tried in vain to save. And he says, the idea astonished and impressed him, that “there is something in that religion that makes them love us like that, something that forgets self, something that I have never dreamed of, something mysterious, glorious, sublime. O, that it were mine.” He went outside and knelt before his Maker and his God. The loving Father gave him the Light. He was converted there and then, and thousands have heard of the gospel of Christ from his lips, and many have been saved through his consecrated efforts. So are medical missionaries continually winning souls to the Master.

But our medical work is doing more than treating thousands of patients each year, doing more than opening new paths for the entrance of the gospel, doing even more than the directly evangelistic work. It is transforming medical practice among over 400,000,000 of people. It is true that the healing art has been practiced in China for thousands of years and they have stumbled upon a few simple remedies, but the practice is based upon

THE GROSSEST OF SUPERSTITION.

They treat their sick ones by making the most horrid noises and dins in the room, by administering nauseating concoctions, by sticking sharp instruments into the body, by boring holes in the palms of the hands and the soles of the feet with hot irons, in order, as they believe, to drive out the evil spirit which is tormenting the body. The native practitioners go on the theory that the body is composed of fire, earth, iron and water; that there are five tubes leading to the stomach, that there are seven openings leading to the heart. They have never learned differently because none has dared to dissect the cadaver. Diseases in the spring are thought to come from the liver, of the summer from the heart, and so on. One man with failing eyesight consulted a native “oculist.” The oculist pierced each eyeball with a needle

TO LET THE LIGHT IN.

It is thought that toothache is caused by the gnawing of a black worm at the roots of the tooth. The logical remedy, therefore, is to hit the tooth sufficiently hard to kill the worm.

All this darkness, ignorance, superstition, and suffering disappears be-
fore the advent of the medical Christian missionary as darkness disappears before the rising eastern sun. Medical missionary effort is the pioneer of Western humanitarian science. The work combines Christianity with the best that Western civilization has to offer, and thus gives it a prestige among the better classes of Chinese. Indeed, so thoroughly awake are the better educated classes of the people becoming to the value of medical work among them, that they are coming forth, as in the cities of Antau and Nauchang, and are offering to build and equip hospitals for our churches if they will but supply the physicians. Here is

A SPLENDID OPPORTUNITY
to do the Master’s work.

Moreover, the present lack in China of properly equipped hospitals for the practice of modern medicine makes the opportunity one which may be grasped at a much smaller outlay of money than will be possible a few years hence. For instance, in Japan to-day, because of the rapid strides forward which that great little people have made in medical and surgical methods, a hospital which will command the respect of the better educated Japanese cannot be built there now for less than thirty or thirty-five thousand dollars, while a hospital which will be exceedingly useful and which will have the respect of all classes of Chinese can be built there, if done today, for from five to ten thousand dollars. What a grand privilege is here presented to the church of Christ in America. For such

A COMPARATIVELY SMALL SUM
paganism, ignorance, superstition, and suffering may be overthrown from among over four hundred millions of people and the gates of the Kingdom of Christ thrown open for the entrance of the great Physician. I hope. I pray, I trust that the churches will not lag behind in the great opportunity presented to Christendom in this great lever—medical missions!

BAGDAD MEDICAL MISSION

ALLOW me to say by way of preface that Bagdad is in Turkey. This is not a mere geographical statement (though even for that I need hardly apologize, for it is by most thought to be in Persia), but has a depth of meaning that only those who have lived and worked in the same empire can fully appreciate; but which for those who have not had that experience I may say means briefly this—that opposition to all true progress is to be expected as the most prominent and consistent policy of those in authority. Passing then to the position of Bagdad from a missionary point of view, the following points will, I hope, be a help towards an understanding of its importance and isolation.

Bagdad is

THE HUB OF A GREAT WHEEL
of caravan routes. Itself a city of 180,000 to 200,000 inhabitants, it is thus connected with all the surrounding countries. Caravans, large and small, pass constantly between it and Syria, Armenia, Persia, and Central Arabia. This not only means the passing to and fro of merchandise and ordinary travelers, but causes it to be traversed by thousands of pilgrims annually, chiefly from Persia and India, to visit the sacred cities of Kerbela, Nejef, Samarra, and the mosque of Kadhimain, all within easy reach of Bagdad. It is stated by an authority on Arabia to be the most important entrance to Arabia itself, with the interior of which we even now have communication by means of our patients.

Our nearest missionary stations are Mosul (C. M. S.), ten days' caravan journey to the north; Busrah (Arabian Mission), four days by river steamer to the south; Damascus (Edin. Med. Miss. Soc.), twenty-five days by caravan to the west; and Hamadan (American Mission), about fifteen days by caravan to the north-east. I can confidently say, therefore, that you will agree with me that

WE ARE NOT CRAMPED FOR SPACE
and this is true both within the city as well as without, for with the exception of a sub-agency of the British and Foreign Bible Society, there is no other agency
for bringing the Gospel to Mohammedan or Jew than the work of the C. M. S.

Of the population of the city, two-thirds are Mohammedans; the remaining third, except for about 5,000 Christians, are Jews. Before describing the agencies at work there, let me remind you that in Turkey, in addition to the Moslem fanaticism which every missionary to Mohammedans must expect, is opposition from the Government; also that the majority of Moslems in and around Bagdad belong to the Shi’ah sect, which is so defiled by contact with a Christian that its adherents can NEVER EAT WITH A CHRISTIAN, or, if he is strict, ever again use the cup out of which a Christian visitor has drunk coffee. A Shi’ah counts his beads to know which doctor should be called in in case of illness, and then counts them again to know whether he may follow his advice or take his medicine; his superstition is such that if a doctor sneezes once while examining a patient, he may save himself the trouble of completing the examination or of prescribing, for they will not follow his treatment. After hearing this, I always managed to get out a second somehow, as sneezing twice is not considered fatal to successful treatment.

In a general way the people there have more of the true Arab about them than the Syrians, in appearance, dress, manners, and customs. Such then, briefly, are the people, and this is the district which the C. M. S. station in Bagdad is striving to influence.

It is a sad contrast to pass from the figures which represent the population and the area of this large district to those which represent the sum total of evangelistic effort in the same.

The agencies employed are a medical mission, schools, a book shop.

Of the various agencies, do not accuse me of partiality if I put THE MEDICAL MISSION FIRST, and apparently unduly magnify its importance. I do not think. I could do that, for in a city like Bagdad, were it not for the medical mission, it would be hard indeed, if not impossible, to get near our Mohammedan neighbors.

I was told that when Dr. Sutton first went there he was considered the one bad thing in Bagdad, and there was much opposition from time to time; but now go to Bagdad, and Dr. Sutton’s name is a household word, and a visit in the early morning to our Out-patient Department would graphically demonstrate to you our present position. You would find the street near our Medical Mission premises thronged with people, and on the arrival of the dispenser to give our admission tickets a clamoring crowd would almost mob him.

SO GREAT IS THIS RUSH AT TIMES that he literally runs away back to his house and seeks shelter there for some time, until the more impatient have got tired of waiting and gone off, and the crowd is lessened somewhat. The reason of this rush is that only a certain number of tickets are given, as, owing to insufficient help, it is not possible to attend to all.

Then there is the In-patient Department, a hired native house in a very crowded quarter, which accommodates eighteen patients. It is the best we can do in the meantime, but it is sadly inadequate, and the accommodation far from ideal. We badly need a properly constructed hospital in a healthy open site; it is an essential for the welfare of both patients and workers. At present, WITH OUR LIMITED ACCOMMODATION, we admit only cases, almost without exception surgical, which cannot possibly be treated as out-patients; also, on account of our small number of workers, we cannot undertake the entire charge of the patients admitted, and so each one has a friend with him or her who waits on him, brings him his meals, etc. This arrangement, while decidedly interfering with the order and tidiness one likes to see in hospital wards, has this compensating advantage, that it brings a greater number to the services held in the wards daily.

By its work the Medical Mission brings us in contact with large numbers
of all classes, not only of the inhabitants of Bagdad, but all the surrounding district, and we have gained their confidence. This being the case, the Mission must become more and more widely known, increasing numbers will flock to it—what sort of a reception are we going to give them? Alas! it appears that, for the second time since January, 1906, we are going to receive them with closed doors. Dr. Johnson, of Kerak, was transferred there for a year, his furlough is now due, the Medical Board will not, as yet, I am sorry to say, sanction my return, and the Committee have "no one to send." [For want of a doctor, the medical work is now closed—Ed.]

In the spring of 1904 a high and sudden rise in the Tigris led to its bursting one of the retaining embankments and flooding the desert around Bagdad as far as eye could reach; slowly the water soaked in, and after it had disappeared, the formerly hard, unyielding desert, which for years had been utterly devoid of any form of vegetable life, except maybe a few thorns, brought forth a luxuriant crop of green grass. That surely is a true picture of the future of this country. Let us do our share in hastening the day.—"Blessed be Egypt," Medical Missions at Home and Abroad.

"Strength for to-day is all we need,
For we never will see to-morrow;
When the to-morrow comes, it will be a to-day
With its measure of joy and sorrow."

THE LIGHT
KATHARINE O. VAN KEUREN
We pause awhile in silence, and adore.
The stately moon is rising, and looks o'er
The quiet earth in slumber wrapped.
How peaceful is the scene! And yet
Can even this peace make us forget?
Will not the morrow bring back our pain again?

How vast is all eternity! Take heart:
Thy sorrow, hard and bitter, shall depart.
God's hand is in the cloud; He leads us slow;
But light there is behind the dark, we know.
We stumble on; till shining through the gray
Behold! the dawn is breaking! It is day.
Rondout, N. Y.
women are given practical instruction in nursing. When their courses are finished they may either work on the station or accept employment outside.

In Canton, Peking, Beirut, Constantinople, and other large cities these humble beginnings have already grown into well-equipped schools of medicine. The Union Medical College of Peking has a faculty of twenty-one instructors, with a five years' course of study.

All the teaching is in the Chinese language and there were twenty-one students last season. The translation of Gray's Anatomy into Chinese (by Dr. Osgood) for the benefit of these students, was an achievement in itself. Canton Hospital had thirty-six medical students, and the Hackett Medical College for Women, in the same city, this year conferred the degree of Doctor of Medicine upon seven Chinese young ladies.

In Constantinople, a New York surgeon—Dr. Carrington—is perfecting the plans for a training school for nurses that will do more for the decadent empire than the Government has ever done. A new hospital, of which the training school will be a feature, is to be built at a cost of $100,000.

One of the most encouraging facts about this work of training is the Loyalty of the natives to their teachers. These mission hospitals can afford to give only the most meager allowances to native assistants, and the awakening governments are holding out lucrative offers to every native qualified to dispense, or operate, or teach, or nurse. Yet a careful search of the last reports of four of the largest missionary boards has failed to disclose a single instance where a hospital suffered the loss of an assistant on this account.

Native Appreciation of the Foreign Doctor

These American physicians are doing more to disarm Oriental prejudice against westerners and Western ideas than the entire diplomatic and consular service. The favorable attitude of Li Hung Chang to the United States, long before China's awakening, was largely due to the influence of Drs. Mackenzie and Meta Howard, whose medical skill he had reason to appreciate personally.

Many of these Americans have been especially honored by the governments in whose dominions they have done their work. One of the Baptist physicians on the Kongo (Dr. Sims), was made a member of the Legion of Honor. Dr. Grenfell of Labrador has been decorated by King Edward. Dr. Avison of Seoul, whose report for last year included 126 visits to the Emperor of Korea, ranks at court just below a cabinet minister.

In striking contrast to the appreciation and honors that have been theirs in the countries where they labor, is the languid interest shown by the physicians of America in this, the most unselfish work that stands to the credit of their profession. I have been present at scores of medical and surgical meetings, ranging all the way from local societies to the American Medical Associations, but I never heard even an allusion to the remarkable work of healing and prevention being done by these over-seas practitioners. It is a long search among the medical journals of the United States before one finds a single article. Much has been written and said by physicians with reference to the important work of Colonel Gorgas in Havana and Panama, but never a word about Dr. Kerr of Canton, whose achievements even Colonel Gorgas might envy. The men who risked their lives in the yellow fever investigations have been appropriately applauded by their colleagues, but no medical society ever hears a reference to the equally daring men that are now imperiling their lives and those of their families in cholera epidemics of the Far East.

One of the reasons for this indifference may be the fact that these physicians whose work is herein described have a habit of wrapping their powders in tracts instead of blank paper; but there is no evidence that this custom interferes with the efficacy of the powders. Because a surgeon prays before he cuts, it must not be inferred that his hands are unsteady or his instruments unsterilized. It deserves to be said that, were
it not for the religious motive, these physicians would not be doing their work in barbarous and semi-civilized lands. Their support is provided not by charitable but by religious people, and for the specific purpose of extending the boundaries of the Christian faith. With all the wealth that the membership represents, who ever heard a suggestion that the American Medical Association sends one of fifty of its members to Africa or China for unmixed humanitarian work? The commission held by these outgoing physicians reads this way: “He sent them to preach the kingdom of God and to heal the sick.” And it is simple justice to say that they are executing their twofold task in a way that is both effective and inoffensive. And they are doing it at a great personal sacrifice. The physician’s average salary of about $1,000 a year is not sufficient to surround his family with even the ordinary comforts of life, yet he is constantly declining positions offered to him by the native governments.

These men and women have a hard and lonely task. Practically all of their friendships must be formed among people of an alien race. For the physician’s wife, there are none of the refinements of cultured society. For his children there are no schools and only dark-skinned playmates. This means that he must either be separated from his children during the most interesting years of their lives, or else must resign his post and accompany them back to the homeland. But when the “All ashore” warning is given aboard the homeward bound steamer, the doctor and his wife usually go down the gangplank and watch their treasure-ship slip away into the misty horizon. Possibly it is the last time they are to see their children; certainly they shall not see them again as children.

Beyond the rim of any horizon that spreads out before the world-traveler’s gaze, these self-exiled countrymen of ours are doing their work among the Yellow, the Brown, and the Black. Their little dispensaries are the outposts of the most merciful that civilization has produced. A century hence the missionary physician will not be needed; his place will have been filled by native men and women trained under his direction. Here and there some white-haired patriarch in China or Bombay, or on the Kongo, will tell to a wondering generation strange tales of The Age That Used To Be—when chloroform and vaccines and serums were unheard of, and when the white-skinned doctor was mobbed when he came across the seas.

But ours is the privilege to stand afar off and watch him while he is doing his beneficent work.

“Every day is a fresh beginning,
Listen, my soul, to the glad refrain,
And spite of old sorrow, and older sinning,
And troubles forecasted, and possible pain,
Take heart with the day, and begin again.”

“TOUCHED WITH THE FEELING OF OUR INFIRMITIES”

Hebrews 4:15

We long for one who can sympathize,
One who is loving and strong and wise;
One who has felt that which we now feel,
And has power to soothe, to help, to heal.

There’s only one who can know and care
The daily trials we may have to bear;
There’s only One, and he is so dear—
Our precious Jesus forever near.

Yes, Jesus our Saviour fully knows
The path by which each of his children goes;
There’s never a burden he will not bear,
There’s never a sorrow he will not share.

And he longs to have us draw nigh to him,
With never a shadow between to dim;
For he was in all points tempted as we,
And is touched by his children’s infirmity.

He was weary, hungry, and often sad,
He was lonely, too, and he sometimes had
No place where he even could lay his head,
And at last to Calvary he was led.

But no one in vain for his help did plead,
He would always the cry of affliction heed;
He touched the lepers, he healed the blind,
He was tender, patient, and always kind.

And now that he dwells in glory on high,
He’s just the same Jesus to whom we cry—
So let us come boldly, and tell our need;
He knoweth our frame and will help indeed.

—A. E. R., in Kingdom Tidings.
A BENEFICENT UNDERTAKING

Already we have noticed in these columns the bequest of Mr. Chas. A. Wood, recently deceased in Washington, in behalf of the establishment of a Sanitarium at Atlantic City, N. J. This gentleman had formerly been a patient at the Battle Creek Sanitarium, and had received great benefit from the treatments and also from the instruction and practice of the principles taught here. He at one time expressed a wish to engage with the Superintendent of the Battle Creek Sanitarium in the establishment of a similar institution in the East, but the proposal was not at that time found to be practicable. Nothing more was said about the matter until shortly after the death of Mr. Wood, which took place a few months ago, when there appeared in the newspapers a dispatch stating that Mr. Wood had dedicated a portion of his estate to the purpose of establishing a Sanitarium at Atlantic City.

Upon investigation it transpired that he had, in his will, associated Dr. Kellogg with this undertaking. The following is a copy of the clause of the will referring to this matter:—

"I give and bequeath to my trustee, hereinafter named, the rest and residue of my estate after the payment in full of all legacies hereinafter provided for, and the satisfaction of all trusts hereinafter created, in trust and for the use and benefit of the J. H. Kellogg Sanitarium of Battle Creek, Michigan, the same to be used under the direction of the said J. H. Kellogg Sanitarium of Battle Creek, Michigan, by my trustee in the erection and maintenance of a sanitarium of the same character and class and for the same uses and purposes as that now conducted by J. H. Kellogg of Battle Creek, Michigan, at or near Atlantic City, New Jersey, the suitability of the site for such sanitarium to be in the direction of the trustee."

The true situation, then, for the first time, began to dawn upon the minds of the Sanitarium managers. The Sanitarium attorney, Judge Jesse Arthur, spent several days in Washington, and his findings confirmed the fact that a large sum of money would be forthcoming for this purpose. It will be seen that the will provides for a residuary sum, the amount of which can not be ascertained until the estate has been settled, and the provisions having precedence are met, so that for the present the exact amount must remain a matter of conjecture. Competent judges have placed the amount at near or perhaps more than one million dollars.

The question that would naturally arise as to the attitude of the heirs in regard to such a bequest has most fortunately been satisfactorily settled by the following kind letter from Mrs. Burnie I. Wood, widow and sole heir of Mr. Chas. E. Wood:—

"J. H. Kellogg, M. D.,

"Dear Sir:—

"Your letter received, and I thank you very much for your kind words of sympathy and also for your very kind invitation to visit you at the Sanitarium. I almost feel that I know you, I have heard my dear husband speak of you and of the Sanitarium so often. I regret very much that I am at present unable to accept your kind invitation, but may some time in the future.

"If you come to Washington any time I would be pleased to have you call, and sincerely hope that the estate of my dear husband will be settled so that your Sanitarium will receive its full share so
as to make it a grand memorial to his dear name.

"Very sincerely,

"Eurnie I. Wood."

Thus the way seems to be clear for the carrying out of this beneficent bequest. It awakens within the hearts of all who have carried heavy burdens in regard to the building up and establishment of the Sanitarium idea as a purely philanthropic and Christian work upon a scientific basis, a deep sense of gratitude to God, who has exercised over the work from its inception a benign providence, has crowned it with blessings and with a success which its most ardent friends could not have anticipated. Recently the institution and its work has been passing through severe ordeals. Its buildings were laid in ashes six years ago, its accumulated capital being entirely consumed except its land and few remaining buildings. Shortly after this many of the friends and supporters of the institution withdrew their sympathy. The denomination with which it had been in a measure affiliated, now renounced that affiliation and engaged in a determined effort to destroy the work, an effort in which they would no doubt have succeeded had not our Heavenly Father exercised over his own work a guardian care.

The result of this effort, however, has been to place the work upon a broader religious and philanthropic basis, and has placed the Sanitarium and its work in a position where its beneficent principles and methods could be extended to the world at large, to whom it rightfully belongs. Many warm and substantial friends have been providentially brought to the support of the work, and multiplied opportunities for blessing and helping mankind now await those who have this work in hand. We can but consider this remarkable gift a direct mark of divine favor, for which we are devoutly thankful, both to the generous donor, and to the great Giver of every good gift. We realize that with it will come greatly increased responsibilities, and we devoutly ask that the same divine Hand and power may minister special grace to those who have this great undertaking in hand, so that the increased facilities which may come to this branch of the gospel may be fully consecrated to humanity for Christ's sake.

G. C. T.

LARGENESS OF HEART

It is recorded that "God gave Solomon wisdom and understanding exceeding much, and largeness of heart even as the sand that is on the seashore." This was a special endowment for the high position which divine Providence had for the king to fill. He not only needed wisdom and understanding superior to that possessed by all other men, but he needed the capacity of thought, of judgment, the range of vision, that would lift him out of a narrow, self-centered policy into the broad region in which the plan of salvation is laid. The servant of Christ needs the same heavenly endowment to-day. We need to remember, as we sing, that—

"The love of God is broader than the measure of man's mind."

We should aspire to rise to the realm of thought where the mind of God dwells. "For as the heavens are higher than the earth, so are my ways higher than your ways, and my thoughts than your thoughts." Narrowness of thought and vision leads men to be cynical and censorious; it leads to bigotry and prejudice; it closes the avenues of compassion and fellowship; places condemnation instead of charity; stultifies the gospel, and in every way interferes with the individual's usefulness.

But largeness of heart does not imply shallowness and superficiality in detail. Thoroughness is not to be sacrificed for breadth of compass. True greatness of mind includes breadth and depth. It embraces the power to see far and to look closely. The greatness of God's mind is not more manifested in his ability to create and control the worlds than it is in the infinite minuteness of his wisdom and knowledge. With the telescope man looks upward into infinite
space filled with gigantic creations of incomprehensible power and glory. With the microscope man looks downward into infinite depths which seem to have no limits, and to the utmost limits of vision the love and wisdom of God are clearly manifested. This is largeness of heart.

It is upon this plan that the mind of the Christian should be planned. He needs to be “able to comprehend with all saints what is the breadth and length and depth and height, and to know the love of Christ which passeth knowledge.” He needs to be able to discern closely and truly between the essential principles of righteousness and Christianity and mere forms. He needs to be able to recognize good wherever it is found; to give Christ his place as the “light that lighteth every man that cometh into the world.” And at the same time it is exceedingly important that no principle of truth should be sacrificed, that no one should smother his God-given convictions of faith and truth.

We all perceive with joy the dawning of a day of better relations between Christians. We begin to anticipate the time when denominational lines shall no longer prove to be barriers to Christian intercourse and co-operation. But there is a danger involved in this approaching condition, and that is that so-called liberalism will lead many to abandon the essential and distinctive doctrines of Scriptural faith and practice. The state of unity and brotherhood to which we seem surely to be coming, does not necessarily involve the sacrifice of those features of belief that stand as pillars to one’s faith. A conglomeration of Christian bodies, brought about by a sentimental love of the brethren, accompanied by an incontinent dropping of all those distinctive convictions which make strong men and women, is not the desideratum at this juncture. No; rather let each one stand in the place where God in his wisdom and providence has stationed him. Let him do faithfully and carefully the work assigned to him in the fear of God and in love to all mankind. The work of the Lord in the earth is varied, and it requires men of different views and convictions to see it all and to leave nothing undone. Shall we not, then, ask that largeness of heart may be given to us that we may see something of the breadth of God’s plan, and of the great variety of workmen and instruments that he can employ? Shall we not be perfectly willing to accord to those who have the glory of God and the good of mankind in view, the same opportunities and the same freedom we ask for the performance of our work? Shall we not take into our confidence and sympathies all who love and serve Christ, even though they do not follow us?

Christian unity consists of unity of spirit, and not of conformity in methods and views. Largeness of heart enables us to exercise to others the love which is prompted by the Holy Spirit; it enables us to recognize the work that others are doing in God’s great plan, and it prevents our throwing away the pillars and groundwork of our own standing before the Lord.

—Alvin B. Bishop.
PHYSIOLOGIC THERAPEUTICS

DANGER OF BACTERIAL INFECTION FROM ORDINARY MEATS

Some years ago the idea became prevalent that uncooked meat is more easily digestible than cooked meat, and this fact has led to the wide-spread practice of using meats in a rare or underdone or half-cooked state, and in many instances to the use of meat in a practically raw condition in the form of scraped or chopped steak, Hamburg steak, in which the meat pulp is made into little cakes and slightly browned upon the outside, the center being scarcely cooked at all. It is well known that the use of meat prepared in this way is a frequent means of introducing embryos of tapeworm.

But the fact is now made known by Tissier, Combe, and others, that a still greater danger, and one which is always present, exists in underdone meats. While raw meat does not always contain the embryos of tapeworm, all forms of flesh food—fish, shell-fish, animal flesh of every sort—always contain poison-forming germs, which, unless killed by thorough cooking, will, when taken into the alimentary canal, thrive and grow there, setting up the same putrefactive processes to which they give rise in animal flesh when exposed to warmth and moisture outside of the body. It is evident, then, that those who insist upon eating meat should take the precaution to cook it very thoroughly, so that the germs which the meat already contains may, so far as possible, be destroyed. It should be remembered, however, that even when this is done, the danger is not fully obviated, for undigested fragments of meat always find their way into the colon, and lodging there, furnish the very best kind of food for the poison-forming germs, so-called meat germs, which are always present, and thus encourage their growth and multiplication. These germs, by their growth, transform the remnants of flesh which find their way into the colon, into poisons which, being absorbed into the body, produce auto-intoxication with all the horrible results which are to be seen in the various forms of chronic disease of the skin, liver, kidneys, and many other maladies the origin of which has heretofore been wrapped in mystery.

DIET FOR EFFICIENCY AND Endurance

That a non-flesh diet is conducive to endurance has been long believed by those who have tried the experiment of living for a few years on a diet that excludes the flesh of animals. The reports of travelers of the running exploits of rice-eating Hindu messengers, the fig- and barley-fed porters of Smyrna, the rice- and bean-eating jinrikisha pushers of Japan, and of the wonderful endurance of certain banana-eating tribes of Mexico and South America; and the well-known fact that the animals most capable of prolonged effort are of the herbivorous or graminivorous class rather than the carnivorous,—these and other facts of like import have gradually impressed themselves upon the minds of thinking men, and especially upon students of nutrition.

The feats of vegetarian athletes in tests of endurance, and especially the test experiments of Fletcher and Fisher, have finally placed the question upon such a footing that it can no longer be ignored, and the leading question which is now being considered by investigators in the physiology of nutrition is the subject of proteid metabolism and the proteid ration.

The elaborate experiments of Chitten den and Mendel on men, supplemented by observations on dogs, showed clearly the advantage of a low proteid ration, but did not specifically show any superiority of vegetable over animal proteid. Perhaps this point remains still to be elucidated by further experiments. Meat-eaters must of necessity eat an excess of proteid, since meat is a high proteid food, and vegetable foods contain an ample proportion of this food principle. It is not yet scientifically settled whether meat is chiefly injurious because it gives to the ration an excess of proteid, or for some other reason; but this
PHYSIOLOGIC THERAPEUTICS

381

question can be settled, and doubtless will be in the near future, by conclusive experiments.

The fact that a non-flesh diet is conducive to endurance is now so well established, however, that several of the most celebrated trainers of athletes have practically adopted the fleshless diet personally, and are willing to make the experiment of training men for the most severe tests of strength and endurance on a diet from which flesh foods are wholly excluded. Within a few months we shall see the matter tested out on the athletic field in competitions between athletic teams trained on the old diet of flesh and high proteid, and those trained on the new, low-proteid, fleshless regimen. The result will be awaited with much interest. A convinced disciple of the natural dietary will feel no anxiety respecting the issue of this practical test, provided, of course, other conditions aside from the diet are equal or nearly so.

The flesh-eater is necessarily crippled when called upon to undergo an endurance test, for the reason that he is in a state of chronic intoxication. Fatigue or exhaustion is the result of the accumulation of paralyzing poisons in the blood and tissues. The brain is weary and ceases to think clearly and well when the poisons which result from work are accumulated to such an extent that the brain cells are paralyzed by them. There are other poisons which produce a similar effect. Horsely, the famous brain surgeon, showed many years ago that meat extracts, when applied to brain tissue, paralyze it at once. Heavy meat-eaters are always sluggish for this reason.

The habitual meat-eater is thus always in a condition bordering on fatigue or exhaustion, and a much shorter time is required for the accumulation within his tissues of sufficient fatigue poisons to induce the condition of tissue poisoning commonly known as fatigue. The same would doubtless be true to a larger degree if the excess of proteid were of vegetable origin, for the worst poisons are doubtless those derived from the putrefactions taking place in the alimentary canal, which are supported by the remnants of proteins which have escaped digestion and absorption. There can be no putrefactions without protein, no more than there can be fire without fuel. Protein is food of putrefactive micro-organisms, just as carbohydrates are the food of acid-forming organisms. Vegetable foodstuffs, however, not only contain no excess of protein, but the vegetable variety of protein is far less prone to go through a putrefactive process than animal protein, as shown by Combe and many other experimenters. The flesh-abstaining athletes will have an excellent chance of defeating their meat-eating antagonists, for their tissues will be free from putrefactions in the colon.

BILIousNESS FROM FATS

That fried pork, sausage, greasy griddle-cakes, cakes, pies, sauces, and other comestibles rich in fat, are productive of "biliousness," whatever may be meant by the term, is a fact familiar to everybody. But why do fats cause biliousness? This is a question that has puzzled the doctor ten thousand times and more, for until the comparatively recent researches of Pawlow no one could tell what possible relation existed between fats and biliousness.

Pawlow, in his remarkable and extraordinarily interesting observations upon dogs, demonstrated that fats diminish to a notable extent the secretion of gastric juice. The important bearing of this fact will be seen when it is remembered that Bouchard demonstrated years ago that biliousness is nothing more nor less than intestinal auto-intoxication; that is, poisoning of the whole body by noxious substances, products of putrefaction from the intestines, especially from the colon.

It has been well established that the gastric juice is a powerful disinfectant or germicide. One of its chief functions is to render the food mass sterile while in the stomach, so that dangerous poison-forming germs will be prevented from entering the intestine. When the
gastric juice fails to do its work, the germs of putrefaction are permitted to live and grow in the stomach. The intestine becomes infected, poisons are formed and absorbed, and autocotoxication or "biliousness" is the result.

There are thousands who live in a state of chronic biliousness on account of the too free indulgence in foods rich in fats. There are those who have acquired an appetite for fats in large amounts, just as there are "candy-eaters" and "meat-eaters." In some cases, no harm whatever seems to follow, the reason being that there is an abnormally abundant secretion of gastric acid, making the effect of the excess of fat to be only to prevent the excessive acid secretion. Thus no harm is done. Indeed, in such cases, the patient may find actual advantage from the free use of fats, a practice often to be recommended in cases of so-called hyperhydrochloria. In nearly half the cases of chronic dyspepsia, slow digestion or hypohydrochloria exists, and this excess of fats is consequently in the highest degree injurious.

**MEAT DIET AND STERILITY**

One of the hackneyed arguments against the antitoxic or non-flesh dietary is that it might lessen the fertility of the race. Although no evidence whatever has been produced in support of this theory, yet it has been brought forward many times during the last thirty years, especially by a certain class of pseudo-scientists who think their chief function in the world to be to find scientific backing for the proposition that whatever is, is right. These men are the versatile apologists for tea and coffee, alcohol, and other popular poisons. One day they insist that these drugs aid digestion, and hence that it is necessary to assist the enfeebled modern stomach to supply the overworked modern brain in its strenuous struggle; the next day, confronted by new and conclusive experimental evidence that the poisons named are highly detrimental to the digestive process, these valiant champions of popular error make the discovery that the modern appetite for tea, coffee, alcohol, and allied poisons is an instinctive demand for a slowing down of the nutritive processes, made too active and vigorous by the refinements of modern cookery, thus averting the terrible dangers pictured by William Roberts as likely to arise from an undue acceleration of nutrition.

It will be interesting to see what use these philosophers will make of the facts obtained by Campbell in dietetic experiments upon rats. According to the British Medical Journal of May 27, 1907, this investigator has found that a meat diet produces in rats interference with the development of the uterus and sterility. When the animals were fed on bread soaked in milk, no such changes occurred. Campbell calls attention to the enormous increase in the amount of flesh food consumed in England within the last fifty years, and associates this fact with the diminished birth-rate, which, as he points out, is specially marked in the "better-off classes, whose means permit of an unrestricted use of the more expensive meat diet."

It is at least fair to say that these experiments by Campbell show the absurdity of the old argument that flesh-eating is necessary to maintain the reproductive activity of the race.

**FACTS ABOUT COMMON SALT**

The facts here presented are chiefly derived from an admirable paper by Dr. Ch. Achard, physician to the Hospital Tenon, Paris, entitled, "Sodium Chlorid in Pathology."

Salt is universally found in the fluids and tissues of animals and vegetables. The amount of salt found per 1,000 parts of animal tissues is for different animals as follows:

- Insects ..................... 6 parts
- Birds ....................... 7 parts
- Land mammals .......... 7 parts
- Sea mammals ............. 8 parts
- Salt water fish .......... 20 parts
- Fresh water fish .......... 8 parts
- Human blood contains 3 parts of sodium chlorid to 1,000 parts.
The salt leaves the body chiefly through the kidneys and skin. The average person takes about two-thirds of an ounce of salt daily. Of this about one-eighth is lost through the skin, most of the remainder through the kidneys. In fasting, salt almost entirely disappears from the urine. Observations on the Italian faster, Succi, showed that after fifteen days of fasting, the urine contained only three grains of salt in twenty-four hours, or about one one-hundredth part of the amount frequently found in the urine.

The use of chlorid of sodium raises the blood-pressure. When salt is removed from the body by profuse sweating or by copious water drinking, the blood-pressure falls.

Richet, an eminent French scientist, has shown that the blood required for a day's ration contains naturally half a grain of salt. Numerous experiments have shown that this amount of salt is exactly the amount which the body requires, and that no more is actually needed. In fact, Richet claims that the amount actually required by the body is even less than half a dram. More than this, as this distinguished scientist says, is luxury, and not necessity.

Dropsy is produced in the great majority of cases by the excessive accumulation of salt in the tissues; the kidneys being unable to eliminate salt, it is pushed out into the tissues and of course must be held in solution by water. For every half ounce of salt retained, a pound of water will be retained to hold it in solution. This is shown by the rapid increase in weight when the kidneys cease to eliminate salt.

Many observations have shown that the kidneys fail to remove chlorid of sodium at the usual rate in various diseases, particularly in pneumonia, pleurisy, Bright's disease, some forms of heart disease, erysipelas, typhoid fever, jaundice, cirrhosis of the liver, scarlet fever, smallpox, edema, and dropsy.

By careful observation it has been found that the retention of salt occurs before dropsy or edema makes its appearance. Several cases which have come under the writer's observation are of interest in this connection. The urine of a patient suffering from diabetes in a moderate degree was found to contain no chlorid of sodium whatever, although the amount taken in the food must have amounted to at least one or two drams. Several examinations made within twenty-four hours showed not a trace of chlorid of sodium in the urine. This was the first indication that the patient's condition was serious. In another twenty-four hours the patient was dead, in spite of all that could be done to prevent a fatal termination. The failure of the kidneys to eliminate chlorid of sodium was evidence that these organs had ceased to do efficient work, and the rapid accumulation of poisons in the body resulted in the patient's death.

In another case, a patient suffering from cardiac disease was found to be eliminating through the kidneys only a very small amount of chlorid of sodium, less than one grain, or about one one-hundredth part the amount usually eliminated. This patient likewise died a few hours later. The kidneys were found in an advanced state of degeneration, the case being absolutely hopeless.

Many similar cases might be cited, including a number of cases in which the withdrawal of salt has been followed by the disappearance of the dropsy and other unpleasant symptoms.

A QUICK METHOD OF STERILIZING THE SKIN

Of the many means which have been devised for sterilizing the skin, the following is the quickest and best: Scrub the skin with soap and water, wash off with clean water to remove the soap, then apply freely a solution consisting of one part officinal tincture of iodin and three parts of alcohol. By this method the skin may be sterilized in five minutes or even less time.

If this application is made just before the administration of the anesthetic is begun, the sterilization of the skin will be thoroughly and efficiently accomplished by the time the operation is begun.
THE MEDICAL MISSIONARY

THE BATTLE CREEK
SANITARIUM AND HOSPITAL
Training-School
For Nurses

offers to Christian young men and young women a splendid opportunity to obtain a fitting up for useful and remunerative employment. Its nurses are always in demand. This Training-School has no rivals in the advantages it offers to student nurses. A new class will be organized April 1st. Full particulars will be supplied on application to the Superintendent,

MRS. M. S. FOY,
Battle Creek, Mich.

60 YEARS' EXPERIENCE

PATENTS

TRADE MARKS

COPYRIGHTS &C.

Anyone sending a sketch and description may quickly ascertain our opinion free whether an invention is probably patentable. Communications strictly confidential. Handbook on Patents sent free. Oldest agency for securing patents. Patents taken through Munn & Co. receive special notice, without charge, in the

Scientific American.

A handsomely illustrated weekly. Largest circulation of any scientific journal. Terms, $3 a year; four months, $1. Sold by all newsdealers.

MUNN & Co., 361 Broadway, New York

Branch Office, 65 F St., Washington, D. C.

The AMERICAN REVIEW REVIEWS
EDITED BY ALBERT SHAW

THE NECESSARY MAGAZINE

Combining the best in all departments

Review of Reviews, 1 year - Price, $3.00
Success, 1 year - - - Price, 1.00
Good Health, 1 year - - - Price, 1.00
Medical Missionary, - - - Price, .75
Total - - - - 5.75

We will send the four, one year, for $3.25.
In making up your year’s reading think of this.

COMBINATIONS

We have arranged a few popular combinations of periodicals at the attractive rates:

Per Year

Medical Missionary with Good Health, - $1.00
Life Boat - - - - - .90
Good Health and Modern Medicine - - 1.50
THE HOME BOOK OF
Modern Medicine

By J. H. KELLOGG, M. D.,
Superintendent of the Battle Creek (Mich.) Sanitarium

Contains over 1,700 pages—500 engravings, colored plates, artotypes
and manikins. Size 10 inches long, 7 wide and 4 thick

This new book should be in every home. Everyone needs a good, reliable medical book. Almost every disease, accident and emergency is described and provided for. The design of this book is not to displace the intelligent, careful physician, but to aid him, and to displace, as far as possible, the vast amount of worthless literature with which mercenary quacks have flooded the land. Very many cases of sickness only require careful nursing; every honest physician will tell you this. The Home Book of Modern Medicine tells how. In severe cases of illness, when a physician is needed, this book will give you information on many matters which the busy physician has not time to tell you about. How to apply rational methods of treatment. On dieting. On nursing and care of the sick-room.

Especial attention is given to the application of those great natural curative agents—water, exercise, diet, electricity and light; these agents are not only the most potent, but, unlike drugs, cannot easily be made means of injury.

One whole chapter of 146 pages is devoted to Rational Remedies for Disease, and a full description is given how to apply these great therapeutic agents IN THE HOME. This chapter alone is worth many times the price of the book.

A cyclopedia of practical information for the prevention and cure of disease.

Three thousand topics considered.

This book is very completely indexed, having an index of symptoms, as well as the general index. Thus you are able to turn instantly to any subject you may need.

We wish to call special attention to the chapter on accidents and emergencies. All the ordinary accidents and emergencies which threaten loss of life or injury to the body are here considered with simple and ready means for averting the threatened danger or alleviating the consequences of accidents which have already occurred.

The most practical treatise on this subject to be found anywhere.

One of the most notable features of this section is the portion devoted to Poisons and their Antidotes. This subject is so arranged that you can turn to the Antidote at once, and is more convenient for ready reference than anything heretofore published.

English Cloth Binding, Marbled Edges, $5.50

Three-Quarter Russia Leather, $6.50

Two-Volume Edition, Three-Quarter Russia Leather, $8.00

Post-paid to any part of the world

MODERN MEDICINE PUBLISHING CO., Battle Creek, Mich.

And at 3 London House Yard, Paternoster Row, London, E. C.

AGENTS WANTED EVERYWHERE. LIBERAL TERMS
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.