

WOMEN'S CLUBS

Edited by MRS. SARAH A. EVANS

Oregon History:

Report of Chairman O. F. W. C.

"An chairman of the Oregon history committee, it is with regret that I present this meager report. You are entitled to more definite, extended and satisfactory information in regard to the work accomplished by the clubs of the state along this line during the past year.

"An outline for the study of this subject was prepared by the committee last autumn. The work was designed to cover two years of leisure study, since only such work can be expected of clubs composed, in the main, of busy home-keeping women. Those clubs doing more strenuous work could accomplish the study in one year.

"Circular letters were sent to each literary club in the state asking for a ready response. Answers came with surprising promptness, but in a majority of cases, other plans had already been adopted. Let me say just here, that the appointment of the present committee came too late for the plans to reach the clubs in good season. Outlines were sent at once to each club desiring one, accompanied by the emphasized request that the chairman be informed as to the progress of the study, also its advantages and its weaknesses. Not one letter has been received in response to this request.

"Since committees can come in touch with the clubs in no other way than by correspondence, this course is both unkind and unwise. Without co-operation on the part of the clubs no efficient work can be accomplished or even hoped for. So, whether the study has been pursued and whether it has proved helpful to the clubs, they will have to be answered for them individually and not by the chairman.

"And now, a few words about the work of the coming year may not be amiss. In these anniversary years—years of such inestimable importance to this northwestern country—it seems especially fitting and important that our women should inform themselves thoroughly as to their own state. While all doubtless have much of general information along this line, it is not so definite, inaccurate and not in a form to be imparted to others. To illustrate: A friend in our city was visited recently by a wide-awake, keen-witted Canadian brother who had no taste for generalities, but wished to learn something. These are some of the questions he 'trod' at his almost defenseless sister: What are the differences between the clubs of the west and your highlands? What are the products of each? To what extent are your foothills arable? Where are your best water powers? It was a bombardment that suggested the best method of operation in the far east, the representative of the Missouri in the struggle at Fort Arthur. But like the Slav, she has not yet capitulated, but is ordering books of history, and asking the state and other available information, with the determination to make the indefatigable effort.

"Besides this somewhat utilitarian view there is yet another, quite as important and perhaps of wider reach in its influence. It is the view that begets reverence and respect for those who

first settled the land—who bore the burdens and faced the dangers incident to pioneer life, and made the present civilization possible. In this iconoclastic age, ideals need to be buttressed by reverence and faith, that they may not be destroyed. Before the 'Chair Invisible' was written we thought of Kentucky as the home of beautiful women. Now, thought of horses and blue grass. Now, thought of the sturdy phase of their characteristics in the memory of the pioneer heroes, who made the later life possible. Mr. Allen has made us to partake of their sufferings and their successes. Thus, the lives of the great members of our state crystallize the memories of our forefathers and foremothers—our own sex the bravest, because upon it fell the greatest sufferings. What a procession it is!—How the study of the best brings it into view, English adventurer, French enthusiast, Spanish freebooter, casocked priest and Protestant preacher—all a part of the grand mosaic, its lights and its shadows.

"Will you help in the work of immortalization? As I lay down this work, so imperfectly carried out, may this plea be made, that the study of our state be undertaken by the clubs with both earnestness and reverence.

Respectfully submitted,
ALICE H. DODD, Chairman.

Anna Adams Gordon, Loyal Friend, Noble Woman.

Though lacking in the dramatic incident which has made famous the friendship of David and Jonathan or Damon and Pythias, yet the beautiful love of Anna Adams Gordon and her husband is none the less deep and loyal than that of these historic characters—and quite as worthy to be emblazoned among the annals of the world. There are here and there caustic critics among our brethren who are disposed to speak cynically regarding the loyalty of women's love for each other. This friendship which withstood the test of more than 29 years of the most arduous life is one among the many that might be cited to prove the falsity of such charge. The pages of history have been somewhat crowded with the names of men, also there would have been space to chronicle many commendable things that women have done.

Anna Adams Gordon was born and reared in the historic shades of Boston, and she was educated at the exclusive Mt. Holyoke. Miss Willard used to relate lovingly her first meeting with "Anna" in Boston in 1877, when desiring an organist in the meeting which was being held at the home of the late Mrs. Willard. A slip of a girl, with a shy manner and sweet face, came in response to her request. The women who met there never parted. Anna's life was the life of the one and left the other bereft. No mother could have given more loving care, no daughter more tender service, no sister more loyal love than Miss Adams Gordon gave Miss Willard all those years. No husband's love was ever more protecting, no wife more clinging than was that of this gentle girl and woman to her matchless friend. When the Willard returned in kind the loyal and royal affection.

But while excelling as a friend, Miss

Gordon, who is now vice-president of the National Woman's Christian union and honorable secretary of the world's organization, has also many strong elements of character that commend her to the confidence and trust of the rank and file as well as the leaders of the W. C. T. U.

Having accompanied Miss Willard in the long years of travel, both at home and abroad, Mrs. Gordon had the opportunity to study the various phases of woman's and reform work until she may well be said to be a specialist along those lines. Gifted with a swift intuition, she grasps a situation quickly. It is, however, not with a superficial understanding, but a comprehensive knowledge both as to general scope and specific fact. Her grasp of every thread of detail in the most complicated conditions has been a constant marvel to those of us who have been associated with her through many years.

Miss Gordon is a musician of no mean gifts, both in the interpretation of another's work and in the setting down of the sweet, quaint melodies to which her whole life seems attune. As one of the commissioners appointed by the state legislature of Illinois to manage the making of a statue in honor of the Willard statue in the "Hall of Fame" in the capitol in Washington, Miss Gordon has won the confidence of those associated with her. Should Miss Gordon accept the post of the state legislator, it is certain that intrepid leader is compelled to lay aside the gavel, the W. C. T. U. will still have a chieftain tried and strong.

New Book by Well Known Journalist.

It is with profound pleasure the women of Oregon have received the announcement that Mrs. A. B. Dunway's book has gone to press and will be given to the public before the opening of the Lewis and Clark centennial exposition. For some time Mrs. Dunway's friends have known that she was engaged in writing a story founded on her experience in crossing the plains in the early days of Oregon, but so many have been called and so few chosen, by the unpeppery publisher, that to know she has run the gamut of his criticism, and that she has accepted with open arms and thanks besides, is most gratifying to the many who have for years looked upon her as standing at the head of women journalists in this state, or indeed on this coast. Journalism for women, has rarely been a harvest of shekels, but Mrs. Dunway has probably earned more by her pen than any newspaper woman in the state. She was the pioneer in the west in writing a story founded on her experience in crossing the plains in the early days of Oregon, but so many have been called and so few chosen, by the unpeppery publisher, that to know she has run the gamut of his criticism, and that she has accepted with open arms and thanks besides, is most gratifying to the many who have for years looked upon her as standing at the head of women journalists in this state, or indeed on this coast.

Fine Showing for Texas State Federation.

Writing in a Dallas paper of the recent federation, a correspondent says: "It almost takes one's breath to contemplate the evolution of the Texas fed-

eration. Seven years ago the word 'culture' comprehended its broadest meaning, and a book was its symbol. One would imagine that society had no allment, spiritual or moral, that could not be relieved by a good dose of culture, administered in book capsule. Doolley's vision of Carnegie handing out a library to a starving man on his back doorstep would have served as a portrait of the club idea. Do you remember the 'yard of roses,' 'yard of pantries' or at least the popular gift lithographs that once cemented the friendship of women for their favorite journal? Well, the papers read at those old-time club occasions were like that—sentimentally rounded periods, interspersed with flowery quotations, and set in formal rows, a yard, yes, two or more tire some yards, in length.

"Now the federation counts its philanthropies by the scores—libraries and scholarships, kindergartens and civic betterment music and art for the enjoyment of those unable to supply their own; domestic science, patriotic endeavor, work for home and schools, and for that unfortunate element that has known the influence of neither good homes nor schools. The federation has awakened to the fact that the progress of the world does not depend on the ac-

Anna Gordon.

In the east she happened, with a number of prominent women, to be the guest one afternoon, at the home of Dr. Jennie M. Loefer. Some one proposed that each one give something original for the entertainment of the others. Mrs. Dunway produced the "yellow paper and the poem scribbled upon it"—to use her own words—and read it to the assembly. Its merits met instant recognition, and the demand was made that it be published. Shortly after Mrs. Dunway gave it to a publisher, and for many years the book enjoyed a large sale. Mrs. Dunway's shorter poems have found their way into journals all over the country, and so well known is she to the literary world, that in summing up the literary, or the journalists of the Pacific coast, no list would be complete without her name and her new book will secure for all time the place she has always held well up in the front rank.

profoundly illustrated from the facile pen of Mrs. Thompson-Ston, whose reputation for fine and unusual work has long been established. Charles Scribner's Sons, Price, \$1.50.

"The Marvelous Land of Oz"—By L. Frank Baum. The news that this author has published another book will be welcomed by thousands of little readers and listeners all over the land. Mr. Baum's name has become a household word to nearly every family where children form a part, and his wonderful creations have brought many a smile to little faces where the sun seldom shines. Now comes this new book, just as funny and just as interesting as the others and whose popularity is attested by nearly 40,000 copies having been sold since it was published last July.

Many of the characters are old friends come again to tell more of their "wonderful" life and adventures. This new story narrates the strange experience of a boy named "Tip" in an enchanted land with not only the "Scarecrow" and "Tin Woodman," but also the "Wicked Witch" and the highly magnified "Woggle Bug." The "Scarecrow" and the "Woodman" are familiar figures in Mr. Baum's other books. "Tip" is a boy who has been introduced through the Sunday Journal and the greater part of Portland's juvenile residents heard the "Wizard of Oz" at the Marquam last winter, as rendered by Montgomery and Stone, and none of this little host should be deprived of the pleasure of hearing and knowing more of their old friends and becoming acquainted with some very interesting new

quirement of a little more culture on the part of a limited number of fairly well educated women, but on the amount of leaving those women are enabled to impart to the masses. It is no longer "impractical" and "reform," for it is conscious that to do the work, it must meet the facts as they exist. There are cultured people filling jails and penitentiaries today, and still others at large in the prisons in awaiting trial, because they lack the elemental principles of morality. There are children growing up in vice and wretchedness to swell the ranks of perverts that will menace the future. The self culture club has served its purpose in awakening women to these facts, and to the true remedy; the present club spirit, as evidenced in the altruism of federation lines of work, denting with the very root of evil, proves that the club movement is not a fad, but a splendid force for righteousness whose future is intertwined with the destiny of nations.

Jewish Women Investigate Slum Districts.

The Council of Jewish Women of Cook county, Illinois, has made a thorough investigation of the slum district of Chicago, with a view of determining the causes for the great prevalence in certain quarters of tuberculosis. Their report lays the blame to the laxity of the building department, to the non-enforcement of the factory inspection laws, and to the non-enforcement of the law requiring registration of cases with the city health department. The unclean condition of the city is also held partly responsible for the prevalence of tuberculosis. The Council of Jewish Women of Cook county, Illinois, has made a thorough investigation of the slum district of Chicago, with a view of determining the causes for the great prevalence in certain quarters of tuberculosis. Their report lays the blame to the laxity of the building department, to the non-enforcement of the factory inspection laws, and to the non-enforcement of the law requiring registration of cases with the city health department. The unclean condition of the city is also held partly responsible for the prevalence of tuberculosis. The Council of Jewish Women of Cook county, Illinois, has made a thorough investigation of the slum district of Chicago, with a view of determining the causes for the great prevalence in certain quarters of tuberculosis. Their report lays the blame to the laxity of the building department, to the non-enforcement of the factory inspection laws, and to the non-enforcement of the law requiring registration of cases with the city health department. The unclean condition of the city is also held partly responsible for the prevalence of tuberculosis.

Portland Artists Give Exhibit in Chicago.

On December 6, 7 and 8 an art exhibit and sale were held in Chicago of unusual interest to Oregon, and to Portland in particular, as the work of four of our best known artists was catalogued. Special invitations to the exhibit and sale were issued and it was under the auspices of Mrs. Marian White, editor of the "Fine Arts Journal," and the Maurice club of Chicago. It was held at the home of Mrs. White, 1115 Pratt avenue. Mrs. White gave short talks on the artists and their works. Those who

had the pleasure of hearing her last summer at Chautauque, will realize what a treat was in store for those who were present.

The exhibit and lectures were confined to the "Ark of letters of the greater west." Oregon was represented by Cleveland Rockwell, Francesca Groth-Juan, Jennie E. Wright and Annabelle Parrish; Montana, by Edgar S. Paxson, C. W. Russell and Eiling Golling; Durango, by W. H. Miller; and by Douglas, who visited many of the artists, and examined critically their work, and in the December number of the "Fine Arts Journal" she has given the results of her observations, which are, to say the least, flattering to the talent she found, and full of promise for the future of Portland as an art center.

Club Program A Living Magazine.

Growing tired of the serious things of life, a Chicago club last week gave a decidedly novel program, which was as witty and humorous as it was unique, and may serve as an inspiration to some Oregon club when its wheels get clogged with weight of serious work. The topic was "A Living Magazine," and the program:

Frontispiece—"Our President."

Types of Club Women: 1. As the Average Man Thinks She Is. 2. As the Newspapers Caricature Her. 3. The Frivolous Member. 4. The Ideal Member.

"Ballade of 1830."

"The Sweet Girl Graduate."

"The Minuet" (a statute after Miss Bessie O. Potter).

"Dangerous" (a black and white after Charles Dana Gibson).

"Current Events," "Wit and Humor," with popular picture "ads," give variety and fun to the pages.

One can readily see how this could be worked out in different ways to suit the tastes or conditions of the club giving it.

Coquille Club To do Good Work.

Ever to the front in club spirit and enterprise, the Woman's Study club of Coquille presents for the year one of the neatest, most complete little year books in the state. The club was organized in 1903, joined the state federation the next year, and one year later affiliated with the general federation. While organized for study work, it often steps from the beaten path to take a hand in civic or philanthropic work, and unless some one, within the next week, "takes them," this club will name the woman to unveil the Sacajawea statue. One of the inspiring spirits in all the club work has been Mrs. J. Curtis Snook, who has been its president since the club was organized. The artists whom for several months Mrs. Snook has been visiting in California and during her absence her duties have been ably discharged by Mrs. John J. Handsaker, the first vice-president. American literature will occupy the time of the club for the next year, and a very full and comprehensive course is outlined, as shown by the year book.

GOSSIP OF SOME CURRENT BOOKS

THE HISTORY of North America, "The Colonial Era," "The Revolutionary War," "The Westward Movement," "The Civil War," "The Reconstruction," "The Gilded Age," "The Progressive Era," "The Modern Era." Edited by Dr. Guy Carleton Lee. For systematic research and complete information on the history of North America, this book is a treasure. It is the work of a staff of writers, each in his particular line of work has no superior, and scarcely a peer; each has been selected for his peculiar fitness for the period of American history he has been invited to write upon, and each in presenting his work to the public, has been able to do so with the full assurance that the strongest line-light of criticism may be thrown upon it, and in the test it will not be found wanting in accuracy or authenticity.

What has been said of the first four volumes, each a complete history in itself, but collectively making a strong, compact, conscientious narrative, may be said of the entire set. The publishers, Professor James, who enjoyed an enviable reputation as a profound scholar and brilliant writer, has given color and life to this the most profitable and unromantic period of American colonization. Of stupendous moment would express more clearly than any thing else this period which virtually forms the sixth phase of the colonization of North America.

To the early phases which embrace the myths and legends, there attaches the interest of romance. In the second phase our attention is held by the vagueness and uncertainty of the Norsemen upon Iceland and the midlands and here we find history beginning. The third phase gives us the settlement of the great country south of the Rio Grande with its tropical grandeur and its ever increasing problems. The fourth phase deals with the westward movement of the south with its Virginia cavaliers and its impulsive Carolinians, its Spanish "Don" and French savants. The

fifth introduces the "holy experiment" of Penn and the boundary disputes of Lord Baltimore; but the sixth, with which Professor James grapples, had its seat in regions distant, and its focus on the rock-bound coast of New England. The stern unbending material he had to work with, the forbidding subject of hide-bound religious prejudice and controversy, made his task a difficult one, yet in the volume just presented, he has accomplished it so skillfully, that in intense interest, clear and lucid language, fair and fearless treatment this fifth volume equals any of its predecessors.

While the extent of the colonization of New England could not be compared with any of the other territories, in the life of the nation it outranks them all in its importance.

Dr. Lee very truthfully says: "A study of her history throws light upon the most pressing and the most difficult problems that confront—the historical student. These problems are as diverse in nature as they are complex in character. They concern such matters as government institutions, social conventions, economic impulses, theological disputations, and secular contentions, small fragments of which are held in the well worn having but absolutely indispensable to the complete history of North America. This, like the other vol-

umes, is elaborately illustrated with water color facsimiles, photographs, maps, etc. Twenty volumes will comprise the entire story. They are being issued at the rate of one a month. 'Till all have left the press, they are complete the price will be \$7.50. For further particulars, write to George Barrie & Sons, 1513 Walnut street, Philadelphia.

"A Captain of the Ranks"—By George Cary Eggleston. This book deals with a period in the history of the United States, not so threadbare as the civil war, which has been told in song and story until every detail of every battle has been made the turning point in the great issue between north and south.

Mr. Eggleston's story follows just after the war, and is told with the wonderful upbuilding that is characteristic of that period, and in which many of the best young Virginians played an important part.

The author tells us that the personality of the story is fictitious, and its events are mainly facts, and that the reader on and on through the most compelling scenes and interesting situations, it reaches the last chapter and "all's well."

The hero, "Gullford Duncan," is a young captain in the southern army, and when all hope for the south dies, after a last battle, he goes west to Cairo, and enters the great army of workers.

Possessed of a university education, and a graduate of the law, he nevertheless knew very little of its actual practice, but appeared well grounded in the principles of his underlying principles he added strong and healthy physique, unbounded courage and laudable ambition. Being absolutely alone in the world, and penniless, the necessity of working for a living came to him, and he joyfully welcomed it as something vastly better and worthier of his strong, young manhood

than brooding over misfortunes, and a lost cause. He wooed success, and as to all such young and hopeful spirits, of course, it came, and he won for himself not only money and position, but one of the sweetest and bravest young women of fiction—"Barbara Verne," the heroine whose courage and wise counsel, sympathy and understanding of "Gullford Duncan" helped not a little to make this one of the author's strongest and best books, although it is but to supplement the trilogy of romances which have gone before in which Mr. Eggleston endeavored to show forth the Virginia character under varying conditions.

"What gift will be most acceptable?" there comes the answer in the form of a blue linen book, neatly and strongly bound, with the most attractive illustrations and best story imaginable.

We all know what a fine story Ernest Thompson-Ston can tell, and this "Monarch" is one of his best. It will prove especially interesting to western readers, as it is a story of California and the west, where the reader feels the clear, calm atmosphere, the spicy, resinous odor of mountains and forests, and the mysterious darkness of a western night. The story scintillates with that outdoor life where the night bird sings to ears attuned to listen and understand and the giant redwood whispers a language of its own.

The story of "Monarch" is founded on facts gathered from many sources and this bear is of necessity a composite, but the great "Grizzly," still pacing his prison floor in Golden Gate park is the central fact of the story. Many different bears were contributors to the early part of this story, but the last two chapters are the actual incidents in capturing the great bear who still lives in the San Francisco park.

The great bear's captivity and his despair is one of the most touching incidents they are recorded of an animal's life and lends almost human passions to the great, brave beast. The book is

profundly illustrated from the facile pen of Mrs. Thompson-Ston, whose reputation for fine and unusual work has long been established. Charles Scribner's Sons, Price, \$1.50.

"The Marvelous Land of Oz"—By L. Frank Baum. The news that this author has published another book will be welcomed by thousands of little readers and listeners all over the land. Mr. Baum's name has become a household word to nearly every family where children form a part, and his wonderful creations have brought many a smile to little faces where the sun seldom shines. Now comes this new book, just as funny and just as interesting as the others and whose popularity is attested by nearly 40,000 copies having been sold since it was published last July.

Many of the characters are old friends come again to tell more of their "wonderful" life and adventures. This new story narrates the strange experience of a boy named "Tip" in an enchanted land with not only the "Scarecrow" and "Tin Woodman," but also the "Wicked Witch" and the highly magnified "Woggle Bug." The "Scarecrow" and the "Woodman" are familiar figures in Mr. Baum's other books. "Tip" is a boy who has been introduced through the Sunday Journal and the greater part of Portland's juvenile residents heard the "Wizard of Oz" at the Marquam last winter, as rendered by Montgomery and Stone, and none of this little host should be deprived of the pleasure of hearing and knowing more of their old friends and becoming acquainted with some very interesting new

ones in "The Marvelous Land of Oz." The Reilly & Britton Co., J. K. Gill, Portland. Price \$1.25.

MAGAZINES

In the Christmas number of the Fine Arts Journal published in Chicago and edited by Mrs. Marian White, Oregon finds itself honored indeed. More than half the magazine is devoted to the art and literature of Oregon, particular attention being given the artists who cluster about Portland.

During a visit to the coast last summer Mrs. White gathered her material, and that it was culled with clear-sighted discernment the magazine now gives ample testimony of. The artists whom she has chosen to represent Oregon are Cleveland Rockwell, Francesca Groth-Juan, Jennie E. Wright, W. S. Parrot and Annabelle Hutchinson-Parrish, and it goes without saying that Homer Davison, a peerless wood carver, has not been overlooked. An example from the work of each, except Mr. Davenport's, is reproduced in clear and exquisite half-tones. One of W. S. Parrot's some one, within the next week, "takes them," this club will name the woman to unveil the Sacajawea statue. One of the inspiring spirits in all the club work has been Mrs. J. Curtis Snook, who has been its president since the club was organized. The artists whom for several months Mrs. Snook has been visiting in California and during her absence her duties have been ably discharged by Mrs. John J. Handsaker, the first vice-president. American literature will occupy the time of the club for the next year, and a very full and comprehensive course is outlined, as shown by the year book.

WALKING ON FERY STONES A MYSTERY TO SCIENCE

From the New York Herald.

THE National museum may be seen an ordinary flinty stone, which probably escapes the attention of most visitors, but which represents the question as to whether there may not exist in the world something like the stone which is the subject of the following article.

Prof. Langley brought this stone with him after having witnessed the spectacle of natives of the Fiji islands walking barefoot over white-hot stones, and he was the first to describe this incident.

"I saw the spectacle of fire walking in Tahiti. The essential question as to the actual heat of the stones had then, been satisfactorily answered, and after the fourth passage I secured Papa-Jia's (the principal performer), permission to remove from the middle of the pile one stone, which from its size and position, every foot had rested upon in crossing, and which was undoubtedly as hot as any of the others trodden on.

"I had brought over the largest wooden bucket which the ship had, and it was half filled with water. The stone caused the water to hiss nearly to the top of the bucket, and it was thrown into such violent ebullition that a great deal of it boiled over and escaped weigh-

ing. The stone was an exceedingly bad conductor of heat, for it continued to boil the water about 12 minutes, when the ebullition being over, it was removed to the ship.

"The stone was found to weigh 45 pounds, and to be of the shape of a Washington with me and determined its specific gravity to be 2.39, its specific heat 0.19, and its conductivity to be so extremely small that one end of a wire which was held in the hand while the other was heated indifferently in the flame of a blow pipe.

"This partly defeated the aim of the experiment (to find the temperature of the upper part of the stone), since only the lower temperature was found. This mean temperature of the hottest stone of the upper layer, as deduced from the data mentioned, was about 1,500 degrees Fahrenheit. The temperature at which such stones begin to glow, when held by daylight is approximately 1,300 to 1,400 degrees Fahrenheit.

"This performance of the Fijians is every bit as wonderful as if a man put his naked feet on white hot coals, let them remain there a considerable period (for the fire walkers promenade back and forth repeatedly on the blazing stones), and showed not a trace of the infernal flames.

"The theories put forth by eye witnesses of this apparent miracle (some,

like Prof. Langley, scientific observers), are alike, and are so many philosophical systems.

Some of these observers have contented themselves with the superficial remark that the stones were not so hot as they appeared. Prof. Langley's experiment has demonstrated the truth of this hypothesis. Other observers admit the presence of intense heat, and endeavor to call science to their aid in explaining the phenomenon. Prof. W. F. Barrett remarks:

"If a white hot ball of metal, preferably of copper, be lowered into a vessel of water containing a little soap in solution it will enter the water without any ebullition of steam, and the ball will remain white hot in the midst of the water for a considerable time. The ball, in fact, does not touch the water, and the latter remains only slightly warmed until the temperature of the ball falls below a certain point, when it comes in contact with the water and violent ebullition ensues.

"The phenomenon is really attributable to a repulsive force, discovered by Sir William Crookes, which occurs when a hot body is brought very near a cold one."

It has been argued that a similar phenomenon occurs in cases when the human hand is plunged into molten metal

and instantly withdrawn unharmed, owing to the rapid evaporation from the surface of the skin, which creates a momentary protection. But it has been pointed out that such explanations are for momentary exposures to the heat, whereas the fire walk lasts a very appreciable time.

It has been furthermore urged that chemical substances, such as the oil from the fat of the green frog, or the juice of the aloes plant, are employed by the natives as a protection against the heat. Those putting forth this explanation have never been willing to testify to their faith by a practical experiment in their own person.

As a matter of fact, chemical authorities say that there is no known substance which, smeared upon the body, can alone protect it from the heat of an open furnace. Those endeavoring to explain the matter along these lines say that the fire walker is a native of a hot country, walking all day along roads hot enough to blister the feet of a white man. Their soles, unaccustomed to shoes, become tanned like leather. Besides, an oriental inherits a less sensitive nervous organization than the American or European. The frenzy of religious fervor is also a waywardness of the performer's mind, rendering him insensible to physical pain.

This would do very well were the heat of the stones anywhere within 163 degrees Fahrenheit, the temperature at which albumen coagulates and the substance of the human body disintegrates. But such explanations are inadequate where the temperature of the steaming furnace of stones ranges from 600 to 1,300 degrees Fahrenheit. So great is the heat from the stones that observers have sometimes found it impossible to stand within several feet of the stones, and have been obliged to wear a large mass, forming a white hot furnace.

The statement was made to the Polytechnic society by Colonel Gudgeon, a British resident at Haratonga, that he himself had performed the feat of fire walking. The colonel says:

"I can hardly give you my sensations, but I can say this, that I knew well that I was walking on red hot stones, and I could feel the heat, yet I was not burned. I felt something resembling slight electric shocks, both at the time and afterward, but that is all. I do not know that I should recommend every one to try it. A man must have 'mana' (the mysterious power) to do it. If he has not, it will be too late when he is on the hot stones of Tama-shi-ro."

"To show you the heat of the stones, I quitted half an hour afterward some one

remarked to the priest that the stones would not be hot enough to cook the eggs. The priest replied that he had seen his green branch on the oven and in a quarter of a minute it was blazing.

"I did not walk quickly across the oven, but with deliberation, because I was afraid of the heat, and I was afraid of the point of the stones, and fall. My feet also were very tender. I did not mention the fact, but my impression as I crossed the oven was that the skin would all peel off my feet.

"I really felt, when the task was accomplished, was a tingling sensation, not unlike slight electric shocks, on the soles of my feet, and this continued seven hours or more. The really funny thing is that though the stones were hot enough an hour afterward to burn my green branches of it (dracopis) the very tender skin of my feet was not even hardened by the fire."

The doctors of Dunedin, New Zealand, recently subjected some fire walkers to a careful examination immediately after they came off the burning stones. They found the men's feet and hands extremely cold, which gave rise to some suspicion of the use of a local refrigerant; otherwise, the feet were soft, and there was no sign of any wound. Dr. Hocken, a New Zealand scientist, on a previous occasion even licked the feet

of the fire walkers to see if he could trace any chemical, but without result. He was, however, when he witnessed the fire walking, provided himself with a thermometer, registering up to 400 degrees Fahrenheit. Just before the men walked over the stones the doctor suspended the thermometer over the center of the stones, and six feet above once, as the soldier in the case immediately began to melt. It had, however, registered 282 degrees, and Dr. Hocken remarked that if it had been left it would have registered 400 degrees and then burst.

So far as is known, Colonel Gudgeon has been the only white man to subject himself to the ordeal, and it is to be regretted that there would appear to have been no observers present on that occasion save the natives themselves.

And Bill

"Closewood must be sick. I see the doctor is calling."

"How many times do you think he will call?"

"About 100 times."

"Goodness! You don't mean to say he is that sick?"

"Well, the doctor will call twice for medical services and the rest for the bill."