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[*From Le Tour du Monde.*]

GOOD HEALTH
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BIOGRAPHICAL HEALTH STUDIES.

BY F. L. OSWALD, M. D.,

Author of "Physical Education," "The Bible of Nature," etc.

6. — Governor Vance.

THE poet-philosopher Goethe often lamented the difficulty of finding modern specimens of a *complete man*, — an ideal of which the character of Xenophon appears to have realized his highest conception.

"Our one-sided accomplishments," he says, "resemble the deformities of athletes with giant arms and dwarf shanks, or *vice versa*, and outside of England it is not easy to find a famous contemporary who has not sacrificed the man to the specialist."

The word "England" is here probably used as a synonym of "Greater Britain," and in the United States, as in Australia and the British-African colonies, moral and physical elbow-room offers abundant opportunities for combining the conditions of a comprehensive life, in the classical sense of the term.

That possibility is strikingly illustrated in the career of Governor Vance of North Carolina. The "War Governor of the South," as the newspapers called him in 1863, was not only an able statesman and a plucky soldier, but a philanthropist, a practical philosopher, a reformer, a scholar, a mighty orator, a humorist, a keen sportsman, and all in all, probably the most popular man of his State.

He was a native of the North Carolina highlands. Nearly a hundred years ago his parents had settled in the "Land of the Sky," the airy plateau at the source of the French Broad River, where hot summers are unknown, and the severity of the short winter is offset by an inexhaustible abundance of fuel. At the time of Zebulon Vance's birth (1830), the entire mountain system of the southern Alleghanies resembled a game park, and the sport-loving governor afterward often used to say that he felt like the boy who had reached town just in time to see the museum before its conflagration.

"I had my innings," said he, "and could mention things that would make my nephews turn sick with envy; on Nantihala (a tributary of the Tennessee) we once killed eight bucks in one day and twenty-three coons the next night. You did not need a guide in those days to catch trout; they were everywhere, and snapped in a way that the only difficulty was to find bait enough. It did waste weeks of my time, but I call him a lucky fellow who has had a chance to sow his wild oats in the woods and mountains."

The young highlander was equally lucky in the choice of his college-town. After a few weeks of preparatory studies in Raleigh, he went to the Washington Academy in the northeast corner of Tennessee, where the hills of the Virginia border rise like an amphitheater to the cloud-capped range of the Unakas which here attain their maximum elevation of 6500 feet. In the course of the first winter, Zebulon Vance worked his way up from the fifteenth to the fourth rank of his class, and remained near the head ever after, though he did not stint himself in recreations, footraces, cricket, and hunting trips, the latter often in defiance of college regulations and parental injunctions, but, at all events, less opposed to the health rules of nature than the alcohol orgies of the German students. Young Vance, after a sore struggle with his poetic penchants, decided to devote

himself to the profession of the law, and completed his studies at the university of Chapel Hill, N. C., where one of his fellow-students was much impressed with his talent for oratory, and describes him as a "young fellow with a keen sense of humor, but capable of rising to impassioned flights of eloquence and brim full of reform projects."

As a barrister, he felt the necessity of "becoming conspicuous at any price," but loathed the common expedient of gaining notoriety by the virulence of personal abuse. "I have won my forensic battles with a different plan of tactics," he says in a memoir of ante-bellum days, "whether a much fairer one, I do not presume to decide. In pleading a doubtful case, you have your opponent at your mercy, if you can impress the jury with the idea that by voting against your client they are imperiling their own liberties and civil rights. That bias will settle their verdict, and save you a lot of time and blackguardism."

In the ex-highlander's opinion the value of time-saving methods was enhanced by his horror of court-house miasma. His appointment as county solicitor did not much mend matters, but in 1855, when he was elected to the legislature, he heaved a sigh of relief. "The race is won," he wrote, "I have, after all, not suffered abuse and nausea in vain. Legislatures are not above pettifogging practices, but they have at least sense enough to ventilate their assembly rooms. What nonsense to denounce our forefathers as barbarians for holding court under green shade trees!" In his subsequent stump campaigns he often acted upon that ancestral plan, and declared his willingness to "say anything or deny anything they please, if they will not ask me to stifle in one of their sweltering dens."

In 1858 Vance was sent to the House of Representatives, and summed up his impression of Washington, D. C., as "a city that cannot boast a happy location and ought to be at least a hundred miles farther inland, but has really been improved into a decidedly habitable place. The planters of those magnificent avenues have honestly made the best they could of an ill-chosen site."

"Of course, you would prefer Asheville," said one of his bantering political opponents.

"O, do you think I am 'talking Buncombe'?" laughed the representative of North Carolina; "no, indeed; but what's the matter with Cumberland, or Deerpark, Maryland?"

As governor of his State, he evinced a similar prejudice against the location of Raleigh, though he appreciated its railway facilities; but when the snort of the iron horse was heard in the Land of the Sky, he confessed a "constant temptation to avail myself of my unrighteous free pass." He felt like a sojourner in the lowlands. "I 'm going *home* for a couple of weeks," he used to say, whenever he found or made a chance to enjoy an outing in the mountains.

There are conclusive documentary proofs of the fact that the subsequent "War Governor" at first opposed the secession of North Carolina. In some way or other he appears to have foreseen the result of the rash revolt, but like Prince Hagen of the Nibelungen, he resolved to perish fighting when the die was cast, and drilled his regiment of volunteers with an energy that left no doubt about the sincerity of his intention to "stand by his neighbors for better or worse."

"Let's all help together, and we may contrive to settle this thing with a rush," said he on one of his recruiting trips; "if we wait for the Yanks to recover from their surprise, we are lost." That view of the situation, which was shared by Toombs and Sydney Johnstone, did not suit the plan of the Richmond authorities, but Vance's exertions made him so popular that in 1862 he was elected governor with prerogatives which practically made him dictator of his native State. The news of his election reached him in the field, and would have entitled him to resign his command at once, but the chief of his brigade had just then adopted a new plan of strategy, and Vance marched along to see the result of the experiment. In his speeches against the extravagance of the pension grants, he afterward asserted from personal experience that the hardships of a campaign had in nine out of ten cases improved the chances of a soldier's longevity, "barring bullet risks and barbecues in captured distilleries." "The same fellows who ascribe all their ailments to camp-life," he said, "were never healthier in their lives than during and right after that war."

He, of course, admitted exceptions to that rule, and, indeed, never assumed the rôle of a military fire-eater. "Can a real man feel any such thing as fear in the heat of a battle?" asked one of his messmates during his last campaign. "I do n't know," said Vance, and then added in a whisper, "but I do know one thing: if I had not been Governor of North Carolina, I should have run away."

From the day he reached Raleigh, his chief efforts were directed to the re-organization of the commissary department. "Use any kind of spur you please," he said in one of his characteristic speeches, "but do not starve your horse if you expect him to win the race." He divided his State into "districts

of supply," with regularly appointed overseers, and a number of registered workmen for each farm; he built granaries and purchased a European steamer that enjoyed a phenomenal luck in running blockades and landing provisions enough to supply the troops of two neighboring States as well as those of North Carolina. Nor did he ever weary in his efforts to mitigate the suffering of Federal soldiers in Southern prisons. "Beware lest those atrocities recoil on your heads," was his comment on the rumors from Andersonville; "those jail fevers are going to start a fire that will destroy your own land, morally and physically."

Then came the episode of Gettysburg and the "beginning of the end." Vance, on the one hand, advised the President of the Confederacy not to refuse any acceptable compromise, but on the other hand, repeatedly and passionately urged a change of tactics, if the South still entertained the hope of solving its tangle of difficulties with the edge of the sword. His plan seems to have consisted in the concentration of all the available forces upon the Virginia frontier and the employment of mounted guerrillas like those that wore out the fortitude of the Roman legions under Crassus and broke the power of Napoleon in the Russian campaign. North Carolina itself was at last invaded from the east and south, the collection of supplies became more and more difficult, and the "War Governor's" health declined under a complication of distracting difficulties and disappointments. "These last ten months have taken more than ten years out of my life," said he in 1865, and subsequent events did not tend to restore the equilibrium of his disordered nerves. He was captured, dragged to Washington, and flung into prison, while chaos reigned in his native State, and the stronghold of the Confederacy collapsed like a burning building.

When the prisoner at last regained his liberty, his friends hardly knew him. He had become gray and wrinkled; but even his death at that time would have proved nothing against the vigor of his original constitution. It is not hard work that undermines the foundations of health, but the depressing thought of having worked hard in vain. Less toil and less worry killed stout Czar Nicholas soon after the conclusion of the Crimean War, and Napoleon the third after the surrender of Sedan.

To relieve his severe financial reverses he resumed the practice of the law, and soon after was elected U. S. Senator, but was not allowed to take his seat. He then settled in Charlotte, N. C., and only there began now and then to seek solace in the pleasures of the table. As he himself expressed it, he had to "do something or other to lethargize his worry and keep from going crazy." In the second volume of his autobiography, the Cavalier Trenck, whom Frederick the Great clapped in the Citadel of Magdeburg to cure his mutinous obstinacy, states that his jailers deserved his gratitude for having curtailed his bread rations. "With an unlimited supply of black rye bread," he says, "I should have run a risk of eating myself sick and silly, for lack of any other pastime;" and Marshal Vendome, after the defeat of Ouderarde, indulged in a feast that nearly cost him his life. "Eh, *mon ami, it faut lien se consoler*," said he, when his adjutant found him flushed with wine and gasping with plethora.

Governor Vance, during the ten years following the war, acquired the reputation of a "good liver," but never of a toper, the bibulous habits of his ancestors and certain contemporaries being a favorite topic of his banter. "*Conmortality*, you mean," he remarked, when one of his friends admitted the "conviviality" of his boon companions, "you fellows are going under in a plumb line if you do not take care." He withal maintained that the South was the natural home of Temperance. "Look at Europe," he said, "a hundred million abstainers or very cautious drinkers in the latitudes corresponding to those of Dixie, and two hundred million Schnapsers north of the Alps. That cannot be accident. Just wait and give climate time to work out its mission, and see if the history of reform does not repeat itself in our South States."

"Why, of course," was his comment on the choice of Harriman, Tennessee, for the site of a University of Temperance, "you may call in semi-barbarians and unspeakable Turks, but the Turks, you know, are total abstainers."

Ten years after the collapse of the Confederacy, Vance re-entered the political arena, and in 1876 was re-elected governor by a triumphant majority.

The politicians who had strained every nerve to prevent the re-nomination of the "War Governor," now feared his resentment, but his reform projects kept him too busy to redress his private wrongs. Good roads, free schools, the protection of forests and game, legislative amendments, and the encouragement of manifold industries, inaugurated the era of the New South. Governor Vance re-organized the State bureau of agriculture, and got experts to establish the fact that the mineral wealth of the North Carolina mountains exceeds in variety that of any other region of equal extent in the known world. He published a number of pamphlets on the re-

sources of the State, but was in no hurry to encourage promiscuous immigration. "If the well-being of a country depended on its being crowded with population of any kind," he said, "the Chinese slum-province of Shanghai would be far happier than Switzerland." He watched, however, with pride, the rapid development of the great plateau that stretches from Georgia across the Carolinas to the borders of Maryland. Asheville, the American Heidelburg, was his special pet, and he predicted a time when the extensive belt of uplands would be crowded with such cities.

"'They have found me at last,' our tableland can say, like the Giant Steam," he remarked when he learned that the city of the highlands was going to build a union depot to accommodate its numerous railways. "Is it possible that anybody with his eyes not willfully shut can fail to see the destiny of that plateau? Its climatic advantages fully equal those of the northern lakeshore belt, where city after city passes the hundred thousand mark and the shorehills begin to resemble a continuous garden." He also recognized the advantages of "spinning cotton where it grows," and visited agricultural fairs to urge the development of the rich grazing lands of the mountains and the fruit zone of the "Piedmont Region." To prevent the encroachments of federative monopolies, he advocated the restriction of "trusts," and kept a sharp eye on land grants to railways, but in the midst of all his committee work, found time for a trip to the mountains in order to investigate the phenomenon of the alleged North Carolina volcano. The existence of an active crater at that distance from the sea, he perceived, would be a scientific curiosum of the first magnitude, but he was the first to ridicule the idea when his personal inquiries revealed a strong presumption in favor of the suspicion that the moonshiners had organized the whole scare for anti-revenue purposes.

Those same moonshiners, however, crowded the polls to secure his re-election, remembering his frequent intercessions in behalf of their captive friends.

"I'm a strong partisan of temperance reform myself," said the lenient Governor when he was urged to let the laws take their course, "but there is no sense in conducting the campaign in this one-sided method. In the first place, we encourage gin venders by sharing their profits and keeping up the high price of their poison, and then turn around savagely on starving mountaineers for yielding to an irresistible temptation."

In 1880 Governor Vance re-entered the U. S. Senate, and the Carolina patriot was merged in the national reformer. With one single exception the Democratic party never produced a more popular orator, and Senator Vance's inexhaustible stock of clever stories and parable anecdotes attested his versatility and the unrivaled many-sidedness of his information.

The number of his friends steadily increased, but the sunshine of popularity could never quite neutralize the after-effects of the storm and stress period that had sapped the sources of his vital vigor. A progressive *asthenia*, or general debility of the nervous organism, manifested itself in such symptoms as vertigo and failing eyesight, and a year ago the popular politician confessed a strange longing to return to his native mountains.

His conceptions of duty prevailed against these instinctive yearnings, which finally ceased, as if the inner monitor had relinquished a hopeless task. The old "War Governor" felt the impending necessity of another surrender; but found comfort in the thought that a man's length of life cannot always be measured by calendar years. "Julius Cæsar," he said, "had lived a century in experience and adventures before he reached his fortieth year, while George the Third died before he knew what he had lived for."

During a spell of genial sunshine in March, the invalid rallied, and his friends began to entertain hopes of his ability to recover if he could hold out till May; but a relapse of winter weather confined him to his room, and the flickering of the vital flame was at last ended by a stroke of apoplexy.

(To be continued.)

NOT ALONE.— Very stout persons may sometimes be noticed glancing at other stout persons with a placid expression that seems to say, "Well, I am not as stout as that, anyway;" or, "There is some one who is quite as stout as I am." Evidently it is a consoling thought.

The French Marshall Vivonne once indicated this feeling in a witty reply to the king. Vivonne and the Comte d'Auvergne were probably the most corpulent gentlemen in the court at the time.

"Marshall, you are really getting too fat," said the king. "You ought to take more exercise."

"Your majesty does not know, then, that I take a great deal of exercise?"

"No. What do you do?"

"I walk around the Comte d'Auvergne three times a day."—*Sel.*

HEALTH HABITS.

BY HELEN L. MANNING.

VI.— HEALTH AND BEAUTY IN DRESS.

DRESS, like fire, is a good servant, but a bad master, yet it is a sad truth that dress masters more than it serves. While the dress of the masculine half of mankind is not above criticism, it is infinitely superior in all essentials to that worn by the feminine half. And what may we set down as these essentials? Are they not warmth and protection, comfort, unobstructed freedom of movement, beauty, and artistic effects? Is a woman comfortably dressed who has to duck her head to get her bonnet on, or worse still, when she must put on her bonnet and her boots before she does her corset? Is she comfortably dressed when she cannot clasp her arms above her head, or pick up her handkerchief if it falls to the floor? Are her movements unobstructed when she must push six or eight pounds with her knees at every step and drag a still greater weight after her? Is a woman artistically dressed when her bodice shows a deep "dip" at the waist line in angular, hourglass style, the top of the corset being distinctly traceable through the gown?

MRS. HATTIE C. FLOWER.

Distorted ideals have been before the eye of the public so long that a truly artistic dress is not recognized as such when it is to be found. It is related of Worth that he remarked to one of his customers that the conventional dress was not healthful. To this the customer replied,—

"Why don't you design for us a dress that in your opinion would be beautiful and healthful?"

"I have, madam, years ago," was the rejoinder, "but you will not wear it."

"What is it? I never heard of it."

"It was very like the Turkish dress,—drawers, sashes, jackets, madam."

There is little doubt but Worth is right in saying that this is an ideal dress for health and beauty, but it is a hard matter to gain for it public recognition. The Dress Congress during the World's Fair, though unsatisfactory in some ways, particularly in the lack of "patterns," which were repeatedly called for, undoubtedly did a great deal toward forwarding the dress reform movement. If we hold, with Ruskin, that "adaptability or utility is the first law of beauty in costume," then there will be no question as to the place which the Syrian dress or some modification of it, ought to occupy, and it certainly seems to be gaining in favor among the leaders of the reform movement. The *Arena* recently published a very interesting symposium on the "Rational Dress Movement," in which are illustrated quite a number of bifurcated gowns worn by prominent ladies to the Columbian Exposition, and also the bicycle costume which received the award of fifty dollars offered by the New York *Herald* for the best design.

Miss Laura Lee, member of the Dress Committee of the National Council of Women, has in the symposium mentioned, this true word for all putting on the new style garments: "The spirit in which one wears a reformed suit of any kind has a great deal to do with the impression which it makes upon the public, as well as the comfort one receives in wearing it. If a woman thinks that her clothes are all right, or are fashioned according to the dictates of the authority which she respects, she never thinks of being stared at, and it does not annoy her if her clothes are noticed. But if she had to wear something that she did not approve, or in which she could not be happy, she would be sensitive to every glance, and it would hurt her to find that she was attracting attention. It is the same with wearing a rational dress. If one believes in the Syrian costume and thinks it the right and proper thing to wear, it should not make any difference whether people notice it or not. We can be unconscious when we feel that we are appropriately and becomingly dressed." Miss

Lee goes on to state that that was the spirit in which she wore her costume to the World's Fair, and so far as she could see, people seemed to receive it in the matter-of-course manner in which she wore it, adding naively, that what they thought did not disturb her, because it is always best to expect the right thing of people.

Miss H. J. Wescott is another who bears testimony, not only to the lightness and freedom of the Syrian dress, but also to the fact that during her trip of two weeks, in which she and her party wore their suits on trains, street cars, and on the grounds, not an instance of unpleasant notoriety was experienced, even from the ever-present small boy, whose appearance they awaited at first with fear and trembling. Mrs. Hattie C. Flower, wife of the editor of the *Arena*, put on the Syrian costume over a year ago, determined that the change should be for life, even if she must wear it alone. During this time she has traveled about as usual in city and country, going to the seaside, the World's Fair, and other places, without encountering any unpleasant experience. She looked forward with some trepidation to meeting the denizens of a certain primitive seaport town, but to her delight, the simplicity of her garb seemed to appeal to their Arcadian tastes. Through the kindness of the *Arena* Publishing Co., we are able to present a cut of Mrs. Flower in her World's Fair costume, and also of Mrs. Marie Reideselle in her prize bicycle dress.

MRS. MARIE REIDESELLE.

Dr. Emily A. Bruce is another lady who went to the World's Fair in a piquant Syrian costume, and among her reasons for urging dress reform, are the following: "I have made the statement elsewhere and venture to repeat it here, that more women die annually in our country from the effects of faulty dressing than from all contagious diseases combined, and that the invalids from this cause alone form a great host which no man can number. This statement is certainly startling, and may seem to the uninitiated incredible, but experience as a physician has forced upon me the conviction of its truth. From the impossibility of obtaining statistics in the matter, the statement can neither be proved nor disproved. . . . The long, heavy skirt is scarcely less dangerous than the tight bodice. It impedes free and graceful movements by embarrassing and entangling the lower extremities, and picks up all sorts of evil things from the street and elsewhere, carrying them home to be distributed to all the family without their knowledge or consent. It aids the wicked bodice in compressing the waist, and drags upon spine, hips, and abdomen, producing a state of exhaustion very conducive to disease."

But the majority of women who are longing for freedom in dress are not yet ready for so radical a change as the adoption of any of the pretty modifications of the Turkish or Syrian costumes. It is generally counted easier to bridge a chasm than to leap it, and to this end are welcomed many pretty and thoroughly wholesome gowns which are light, loose, and comfortable. A charming house dress of this description recently came under the notice of the writer. It was of wine-colored cashmere, with a plain skirt slightly gored, a short, full waist, and coat-sleeves with a puff at the top. The waist was ornamented with a kerchief of China silk, same shade as the dress, rounded in the back and ruffled on the lower edge. It crossed in front, forming a soft belt which

hooked in the back, with a rosette. It is called the "Priscilla," cuts of which are herewith shown, the one according to description just given, and the other, showing the same dress with the kerchief removed and broad linen collar and cuffs substituted, giving an idea of its adaptability. One great advantage which its simplicity affords, is that it is so quickly adjusted. A minute or two will suffice to put it on or take it off, instead of the hour or two required for some of the complicated gowns of fashionable dressmakers.

There is no question but in the business world, woman's hampering dress hinders her from doing her best work. But a distinctive business woman's suit is not likely to obtain in this democratic country, since it savors too much of class distinctions, which, though they exist, are not very gracefully acknowledged. Permanent and universal reforms in dress must be started by the upper social stratas, in order that those who need freedom most, may be reached. Correctly viewed, dress reform is a species of philanthropy, in which both health and morals are included.

But why need there be any prevailing fashions? Why may not each woman have a distinctive, characteristic dress, adapted to her individuality, and which shall in a sense become a part of it; and adapted also to her figure, her purse, and her calling? So long as fashions must be set by any Mrs. Grundy, comfortable and artistic dressing is out of the question, since short women and tall women, lean and stout women, must all be arrayed after the same model. The results of this blind mimicry are absurd in the extreme, and pathetic too, for health suffers and usefulness is crippled. Just now, hideous overskirts and draperies are trying to force themselves upon the fashionable world, crowding out the simple, graceful skirts which with rare taste and good sense, have prevailed so long.

THE PRISCILLA GOWN.

BACK VIEW OF PRISCILLA GOWN, WITHOUT KERCHIEF.

An ideal dress is one which is so comfortable in style and fitting, and suitable in texture to the season and occasion, that the wearer may be wholly oblivious of it and any claims of the body, thus doing away with self-consciousness as relates to dress, at least. It should be so adapted with artistic effects to the individuality of the wearer, that to others it does not assert itself as an entity for admiration or disapproval, but which enhances the charms and individuality of the wearer, and yet is always a subordinate thing, like the frame of a picture.

The "Priscilla" gown is an original design belonging to the Battle Creek Sanitarium Dress System. A new and complete catalogue of this admirable system is just out, and may be obtained upon application to the Sanitary Supply Co., Battle Creek, Mich.

PRIMITIVE METHOD OF CLEANING A WELL.

(*See Frontispiece.*)

(Translated from *Le Tour du Monde.*)

AMONG all our modern resources and inventions, it seems strange to see a well simply a hole in the ground, and to be told that the method of cleaning it is simply for men to dive down to the bottom and bring up the drift sand in buckets,— no diver's suit on, no convenience for bringing up the débris that has rendered the cleaning a necessity.

But this is what our picture presents to us. These are Arabians of the desert, and they have about two hundred of these wells to keep clean. The wells are dug to an average depth of 120 to 130 feet, but they become partially filled by sand, either brought by the water when it flows in from underground passages, or it is blown in by the wind from the desert.

The men who clean the wells form in companies of four, each having its chief, or captain. The ascent and descent of the diver is effected by means of a fixed rope, by which he lets himself down and pulls himself up again. The process of cleaning the wells is one of extreme difficulty and peril, and hence a class of men is employed specially for this purpose. They are called *kertassa*.

When all is ready, but before plunging, the *kertassa* makes sure that the bucket is well at the bottom and conveniently placed, and that the cord attached to it is not entangled with his own rope. This done, he jumps quickly into the water, rubs his head vigorously, and pushes well in the wax with which his ears have been hermetically sealed. After staying on the surface a moment, to accustom himself to the cold water, he lets himself down to the bottom to fill his bucket with sand, and then pulls himself up again, half choked. His bucket is drawn up after him, and he goes off to warm himself by a roaring fire. The usual length of time these *kertassa* stay under water is three to four minutes, but should one remain under longer than that, the bravest of his comrades dives down after him, often to bring up only a corpse.

NURSING IN HOMES, PRIVATE HOSPITALS, AND SANITARIUMS.[1]

BY MRS. S. M. BAKER,

Medical Matron of the Surgical Department of the Battle Creek Sanitarium.

AFTER a quarter of a century's experience, Florence Nightingale said she had found the happiest people, those fondest of their occupation, and the most thankful for life, were those engaged in sick-nursing. Though our experience has been a shorter one, and though it has not been among wounded heroes, but in the hospital and in the home, among all grades of society, I am sure we can heartily re-echo her words.

As nurses, we all understand the regulation and routine of hospital work. Not all of us, perhaps, have had the privilege of going into the home and taking from the hands of nervous and anxious friends, whose very anxiety has led them into all kinds of imprudence, a sick one whose lamp of life is just ready to go out for the want of skilled care.

There is no need to speak of the sacredness of the nurse's calling; how, when she enters a home, the dearest and most sacred things in the family are entrusted to her care, the life of the dear one, and perhaps her spiritual guidance. Much of the family life comes under the observation of the nurse, and even the skeleton in the closet is often revealed to her, sometimes unwittingly, and again with a half hope that one who is so helpful in other things may help here also. There is no need to suggest that her influence, if she be devoted, self-sacrificing, and intelligent, may reach out to every department in the home, and most valuable are the lessons that it may be her privilege to teach in the saving of time and strength, in the laying up of those riches beyond price,— health in the body, knowledge in the mind, and Christ in the heart.

Emerson's words to the careful housewife contain a thought that applies as well to the nurse: "I pray you, most excellent wife, cumber not yourself and me to get a curiously rich dinner for this man and woman who have just alighted at our gate; . . . but rather let that stranger see, if he will, in your looks, accents, and behavior, your thought and will,

[1] Read before the Section of Hospitals, Dispensaries, and Nursing, of the International Congress of Charities, Corrections, and Philanthropy, Chicago, June 17, 1893.

that which he cannot buy at any price in any city." It is within the knowledge and province of the nurse to give something more than she is hired to give — something that money cannot buy — to help those with whom she comes in contact professionally to a higher plane of living, because she comes near to their inner life.

The prevailing ignorance among the masses of people even respecting the preparation of healthful food, is astonishing. To answer the purpose of nutrition, food must be of the right material and properly prepared. But there are house-mothers who, even in this advanced day of reforms, will take to the sick, rich pie, cakes, sauces, and dainties prepared in the most indigestible manner, with wines and condiments, and abundance of sweets, — food which seriously disturbs the digestive organs and has no strength-giving power. Even those who have learned that such food is injurious to the sick will still carry them tea, coffee, wine, meat-broths, and hot buttered toast, jellies, etc., expecting them to gain strength from what is only stimulating or indigestible.

Mrs. Kellogg's new book, "Science in the Kitchen," tells us that the purpose of food is to supply material for repairing the waste which is constantly going on in the vital economy. Hence the importance of knowing the comparative values of foods. In the care of the sick, with whom the waste is greater and the vital forces less active, it is needful to know, not only what food is most nutritious, but also what will bring the least tax upon the weakened digestive powers. Soft, warm breads of any kind, fresh, lightly toasted bread included, are not easily digested, for simple reasons. Their softness allows them to be swallowed without proper mastication, and the starch which should have been changed to glucose in the mouth goes into the stomach in lumps which cannot be easily acted upon by the digestive juices. To make such bread still more indigestible, it is penetrated through and through by the fat of the butter, and fat we know is an effectual barrier to the action of the gastric juice.

The nurse will find it necessary to show the anxious wife or mother why fresh warm bread is pernicious, and why the toast should be browned through, instead of on the surface only. She must explain that the tea and coffee are only stimulants; that milk is to be eaten as a food rather than taken as a drink; that condiments are irritating, and bring about the condition "necessary for the acquirement of a taste for intoxicating liquors;" that it has been estimated that "the evils of bad cookery and ill-selected food exceed those of strong drink;" that cold food or drink in the stomach, lowers the temperature of the stomach and consequently lessens its activity; that mastication is the only part of digestion over which we have direct control, and is habitually slighted, and the food thus passed into the stomach lacks the preparatory step in digestion. So it must be explained that toasted water crackers, beaten biscuit, breakfast rolls, zwieback, or bread twenty-four hours old, are wholesome food; while hot soda biscuit, or fresh raised bread, or fresh half-toasted bread is not.

For our very feeble patient, whose powers of digestion are weak, the food must be more concentrated, nutritious, and easily assimilated. Delicious gruels, made from the grains; milk, either cold (not iced) or hot, or made into junket; eggs, prepared in a variety of simple and attractive ways; cream and fruit toasts; refreshing beverages made of milk, whey, almond milk, barley lemonade, egg lemonade, apple beverage, and nature's own delicacies, the fruits, can be attractively arranged, pleasing to the eye and palate. This comes not only under the oversight and work of the nurse, but also under her teaching.

If the food question comes under the influence of the nurse, even more do the treatments for the relief of the patient. The rational medicine of the present day is requiring less of drugs and more of natural remedies. The wife or mother to whose relief the trained nurse comes when sickness enters the home, does not know, perhaps, the stimulating or relaxing and soothing effects of the simple remedies, heat and water. How few really know when tired themselves, or when a child is tired or nervous, that a hot bath, followed by a cool pour, is refreshing to a tired mother and soothing to irritated nerves; that heat to the spine will reduce temperature, control some local inflammations, and check internal hemorrhage; and in case of excessive nervousness or excitement, that the most soothing effects come from alternate hot and cold sponging of the spine.

(To be Continued.)

MOVEMENTS IN WALKING AND RUNNING.

THE movements in walking and running are commonly executed with so great rapidity that it is by no means easy to study their nature, and the various attitudes which the body assumes during the movements. It is apparent that during such movements as walking and running, the body is in a state of constant change, progression forward being a constant falling forward, and the body constantly recovering itself by the alternate forward placing of the feet. The eminent physiologist, Marey, some years ago perfected a means of studying the movements of progression by the aid of photography. In an interesting work published by that author the present year ("Le Mouvement"), all the different forms of locomotion, as well as many other exercises, are explained and ingeniously illustrated by the reproduction of the wonderful photographs which M. Marey has prepared with so much skill.

FIG. 1.

Fig. 1 represents the movement of walking at a somewhat rapid pace. In Fig. 2 are to be seen the movements executed by a professional runner. The outline in Fig. 3 is copied from an ancient Grecian vase. Fig. 4 is a representation of the movements of the wings of a heron in flight. It is interesting to notice the changing expressions of the muscles in the different attitudes assumed in walking and running, which are characteristic of the muscular movements of the face which accompany various mental states. Another interesting fact worthy of note is that the photographic representation of runners proves the acuteness of the observation of the ancient Greek artists, who had better ideas upon this subject than modern artists.

FIG. 2.

FIG. 3.

BRAIN REST IN EXERCISE.— Of all the forms of exercise recommended for persons who are constantly engaged in sedentary occupations, there is none which to my knowledge can take the place of walking. There is a freedom about it that can be secured in no other way. But in order to secure the best results, the body must be entirely free from all conventionalities. The dress must be perfectly easy, no constriction about the waist or any other part of the body. The skirts must be short enough to be out of the way, so the heels will not be continually catching and causing the person to stumble, as well as giving her an awkward gait. The shoes must be very loose, and well fitted to the contour of the foot. A shoe that does not fit the shape of the foot is a serious drawback to the enjoyment of the walker. Throw away the corset, and let the lungs have free play. Throw up the head, swing the arms, and give the body that easy, swinging movement that is such a rest to tired nerves and muscles.

During a visit to the World's Fair last year, the writer was surprised to find how much good the enforced walking was doing toward recuperating wasted muscles and tissue. Being engaged in editorial work, my brain was crammed with other peoples' thoughts, and my muscles were breaking down from inaction. The first two or three days at the Fair, I became very tired, and was ready to rest the next two days. But after that there was no more trouble. The second week of my stay was delightful, and when I left the grounds, it seemed as if I could have walked on there all summer, and never thought of being tired.

But best of all to me was the rest of brain that it gave me. When I went there, my head was very tired, my thoughts came sluggishly, and it was nothing more than drudgery to drag through my work from day to day. When I left, I felt that the accumulations of years had been swept out of my brain, and I could again think my own thoughts, and be myself. The cobwebs were gone, the germs were driven out, and I was master of the citadel again. The sleepy cells had waked up, and were singing their old songs again, memory brought back forgotten scenes, and my old cheerfulness returned. And in all the renovation of the brain, the body was not forgotten. I felt as though every muscle in my body had been cleaned, swept, and garnished.

Of course I do not lay all this good to simply walking. Some of it is due to being out in the air, and to the lake breeze that followed me wherever I turned in the White City. But after all, it was the walking from morning till night, untrammeled as I was by constricting clothing, that wrought the wondrous change. M. A. S.

FIG. 4.

HOW TO GET STRONG.—"Great strength is created, not made," says Sandow, in the New York *Morning Journal.* "I mean by that remark that the bone and sinew must be of the right material, else any amount of training will fail to develop strength. It has been my experience that many have been unable to arrive at satisfactory results through inefficient training. The fault lies with the trainers. To add strength to limb and muscle requires more than running and dieting. A careful study of the laws of hygiene and anatomy must be a part of the knowledge of the trainer, and his discretionary powers must play an active part in the training of his subject. The training of a man who makes his appearance in the prize ring is different from that given a man who uses his strength in lifting and carrying weights. A very good model for the latter class to follow is a statue from some one of the heroes of olden times, when men were bred for the arena. Man was nearer perfection in those days than he is at the present time. Dissipation and vice have reduced us in strength and physique, and if the pace is kept up, I doubt not

that a few centuries hence we shall be a race of consumptive pigmies. Years ago, when I was a boy, with my father I visited Milan, and there in the art galleries I found the model I desired to copy. Day after day I visited the model, each time studying a new muscle or a new bump. Before long I had photographed that statue so firmly on my mind that I could bring it before my gaze at will, and it was my only trainer during my hours of exercise. The growth of strength can only be ascertained by increasing the weight, but it is dangerous to test your powers too far. Fools have attempted to lift more than their reason dictated, and have met with failure. The wise man will continue to live so long as his egotism remains dormant."

A GYMNASIUM AT HOME. — The advantages of gymnasium practice for young children, and its direct bearing on their future, can hardly be reckoned, writes Ellen Le Garde in the *Ladies' Home Journal.* Strange to say, the most common defect in the physical status of children is a most grievous one; namely-lateral curvature of the spine. The majority of cur, vature cases occur between the ages of five and fourteen, and need not happen at all if the matter is properly understood and attended to. These tender little bodies will bend and permanently shape, like young plants, in whatever way their growth is directed. If your child is carelessly permitted to assume one position for any lengthened period, you may expect, as a result, a one-sided development. If, by more frequent use, either side is put to greater action than the other, it will become so much stronger that all muscular movements will be performed from it, and it will, in time, obtain complete mastery over the deficient development, the latter finally being rendered unable to perform its natural functions. From this, hip disease, as well as curved spine, results. The proverbial ounce of prevention is always better than the pound of cure, particularly in this case.

THE CYCLE STOOP. — While there is much to be said in favor of cycling as an exercise for both men and women, there is also a very emphatic Do n't to be uttered with regard to the position which many people assume when rdiing. The cycle stoop makes all benefit from the exercise impossible; it compresses the lungs, rendering it impossible to breathe properly, and, if persisted in, will produce a very serious spinal curvature. Though, of course, the professional "sprinters" are the worst offenders, there are many ambitious riders who fall into the habit from a foolish desire to attain speed, without realizing that they are endangering health thereby. To their credit be it said, very few women have fallen into this pernicious habit. As an exercise for those suffering from dyspepsia, either anæmic or nervous, or from any derangement of the digestive organs, and for persons prone to rheumatism, correct cycling, with the shoulders held erect, has proved very beneficial. It is a great advantage also to students and all who lead a sedentary life, for it sends the blood circulating vigorously through the whole body, and purifies it with the deep draughts of pure fresh air which the lungs are compelled to inhale. — *Demorest's Magazine.*

VEGETARIAN ATHLETES. — Until recently it has been believed that vegetarians could not compete with flesh-eaters in athletic feats. Late experiments seem to show this to be an error, though we need still further tests perhaps to settle the question to the satisfaction of all. In the great walk from Berlin to Vienna, a distance of 361 miles, the vegetarians were so much ahead that the flesh-eaters were really not "in it" at all. At another late walking match in Germany, thirteen vegetarians and twenty-six flesh-eaters entered for a walk of some forty miles. The two first at the goal were vegetarians. They ate only brown bread and apples. The first flesh-eater in was only twelve minutes behind. He ate, before starting, a hearty meal of beef, chocolate, and a pint or more of milk. And now we read of a vegetarian cycling club, a member of which ran 100 miles in six hours and 152 miles in twelve hours, with mud, wind, and rain so bad as to be very discouraging, but he kept up his heart and won the medal. We hope these experiments will continue till both friends and opponents are satisfied. — *English Paper.*

INTERESTING FACTS RESPECTING MUSCULAR WORK. — Prof. Vaughan Harley, an eminent English physician connected with the University College, London, has recently published in the *Journal of Physiology* (March 22, 1894) some interesting facts derived from a laborious series of experiments which he has recently completed. The purpose of these experiments was to ascertain the effects of diet, the time of day, and the influence of tobacco upon muscular work. The following is a brief statement of some of the more interesting conclusions which were reached : —

1. As regards the relation of work to the time of day, it was found that the muscles possessed the

greatest capacity for work between the hours of 11 : 30 A. M. and 3 : 30 P. M. It was also found that fatigue occurs later between these hours than at other times. It was also found that more work could be done after midday than before, which is contrary to the usually received opinion. The minimum amount of muscular power was found to be in the morning about 9 A. M., and the maximum about 3 P. M.

2. It was shown that taking food increases the power for muscular work, and retards the approach of fatigue.

3. In reference to the effects of smoking, we quote the words of the author as follows: "Moderate smoking (four cigars a day) in one accustomed to it, neither increases the amount of work nor retards the approach of fatigue." It was found, on the contrary, that smoking "diminishes power and hastens the onset of fatigue."

These interesting and important facts, especially that relating to the influence of tobacco using upon muscular work, ought to be widely diffused. Thousands of men addicted to the use of tobacco justify themselves in continuing this vice with the idea that it in some way assists muscular work. Tobacco is a narcotic. It lessens the sense of fatigue, but does not increase the ability to work, so that actual exhaustion is hastened, even though the sense of fatigue is lessened.

HEALTH AND PHYSICAL BEAUTY.— Healthfulness and physical beauty are more nearly synonymous than we are accustomed to think. The ancient Greeks strove to attain physical perfection — beauty of figure and of face — by means of exercises, baths, and every means known to them of stimulating the bodily functions to a high degree of health. They were intense admirers of physical beauty, and appreciated the fact that health is one of its prime conditions. The modern science of hygiene teaches that the observance of certain laws is necessary for the evolution of the growing boy and girl into the healthy man and woman. Prominent among these laws is that of personal cleanliness. To obtain and to retain a healthful and active condition of the skin, frequent bathing is necessary, followed by active friction with brush or towel. It should be remembered that the skin is an excretory organ ; that material which has been expelled through it collects upon its surface, and must be removed.

The skin also secretes an oily matter which keeps it moist, flexible, and healthy. This is partially removed by bathing, and the healthful secretion is again stimulated by active rubbing. To attain a good development of the muscles, physical exercise must be taken. The growing boy and girl should have a fixed time for exercise, either at home or at school, as well as for study, for eating, and for sleep. The athletic trainer tells his pupils that temperance in all things is necessary for even a fair degree of physical development; he insists upon regularity in exercising, eating, and sleeping. Such a temperate and regular method of living should be the aim of every one. In that sense of the word, every one should keep himself "in training." This is especially important in youth, when not only are habits forming, but the foundations of future good or ill health are being laid. And let it be remembered that the means by which health is best attained are the same means by which one's personal appearance is best improved.— *Youth's Companion.*

LABOR NEEDFUL TO HEALTH.— In a clinical lecture in the London Hospital, the late Sir Andrew Clark once gave a very excellent prescription for health.

"Labor," he said, "is the life of life. And especially is it the life of life to the delicate. And when any organ is sick, it is then truer than in health that even in sickness and delicacy it is better for the organ to do what work of its own it can, providing it can do it without injury. And from a considerable experience of tuberculous pulmonary disease, I can say with perfect confidence that those who have done the best have usually been those who have occupied themselves the most. I never knew my own parents. They both died of phthisis. At the age of twenty-one I myself went to Madeira to die of phthisis. But I did not die, and on coming back, I had the good luck to get into this great hospital, and in those days they were not very well pleased to have the Scotchmen coming to London to occupy such appointments. The members of the staff had heard that I had tubercle, and they wagered 100 to 1 that I would only have the appointment six months at most. The reason given for that was that I did not eat and worked too hard. I got the appointment. Thirty-eight or thirty-nine years have gone since that time, and all the other doctors are gone. Only I am left here on the staff — an old man — not dead yet."

Friend — "Can your daughter play the piano?"

Father (wearily) — "I don't know whether she can or not, but she does."

UNINTENTIONAL HOME TRAINING IN EVIL.

Teaching Cowardice.

BY MARY A. ALLEN, M. D.

"In our education we must not forget the arming of the man," says Emerson. What more perfect armament can there be than physical and moral courage? And yet how often, although unwittingly, do we disarm the child and youth, and then blame them because they manifest fear or cowardly subservience. Infants are tossed, or suddenly sprung upon with shouts, and their hysterical laughter is translated to mean pleasure. In order that older people may be delighted with their manifestations of terror, children are forcibly held over dangerous places, or jestingly threatened with serious evil, which their feeble judgment believes to be actually imminent. To frighten them into silence they are terrified with "bugaboo" stories, and darkness and solitude become peopled for them with untold horrors. In all these ways the nervous system is taxed unduly, and the result may be the breaking down of that physical health which, as Jean Paul Richter says, is "the first step toward courage." "Bodily weakness," he says, "makes mental weakness," and, if we desire brave, courageous sons and daughters, we must avoid all causes which tend to destroy the equilibrium of the nervous system. Needless descriptions of dangers and horrors, exciting the child's imagination, inculcate, not a spirit of bravery to meet real dangers with a stout heart, but a spirit of dread of imaginary dangers. Chiarugi says that children brought up harshly and kept in order by images of terror, frequently become insane. Harsh and severe disciplinary measures, which throw the child into a great mental tumult, may have as serious results. A German writer says: "The effects of frightening imaginative children are incalculable. Aside from the fact that you change for life a brave, courageous child into a timid, cowardly one, who can say how much fever, how many nervous diseases, indeed, how often epilepsy, have their origin in these follies?"

Physical cowardice may be taught to children by manifestations of the same in the adults around them. If the mother or nurse shrieks with terror at the sight of a mouse or a spider, or goes distracted at the sound of thunder, the child receives a lesson in timidity which it will never forget. Every mood of fear or courage which the mother shows, acts contagiously on the child. Over-anxious mothers often teach cowardice by their constant interference with the child's physical activity. "Do n't run, I am afraid you will fall;" "Oh, get down off that fence, you will break your neck," until the adventurous spirit of the child, which needs judicious guiding, is transformed into a timid nature afraid of everything. In one instance a child was actually afraid to run on level ground, it had been so constantly cautioned by the timid mother. The strong, hardy child is not in as much danger from this unwise interference, as is the most delicate one who needs wise incentives to physical activity. Doubtless the girls of to-day who are playing lawn tennis, riding bicycles, and learning to swim, will be mothers who will sympathize with their children in their inclination to climb and run and dive, and do all possible feats of strength or skill.

Cowardice is often taught by those who are anxious to induce the child to do some necessary but painful thing by the telling of a "white lie."

"It won't hurt you one bit to have your tooth out. It is such a little one, and it hangs by a thread. Now see if it hurts." The child believes, has the

tooth out, and finds he has been deceived, and the next time is afraid to have something done which perhaps would not hurt.

Wiser are the parents who say, "It will hurt, but it must be done, and, after all, it is only a pain, and we must be so brave that we are not afraid of a needful hurt."

Moral cowardice may be taught by manifesting, in the hearing of the child, a greater regard for the opinion of the world than for righteousness. Fathers are sometimes teachers of moral cowardice through their severe disciplinary measures. Harshness begets duplicity, and that is moral cowardice. The child has not the courage to tell the truth, knowing that he will receive a whipping therefor, so he tells a falsehood and escapes. Finding this successful, he adopts the plan of slinking away from the difficulties of life, rather than boldly meeting them, and facing the consequences of his own mistakes or faults. A child who is morally strong will endure pain rather than commit a wrong act; the one who is morally weak will do wrong in order to escape pain, and both characters are, to some extent, the result of training. The one has been taught to regard physical pain as beneath the notice of the hero, while an attempt has been made to drive the other to heroism by means of pain, and this attempt has made him a coward; for heroism must exist in the moral nature before it can find physical expression — it cannot be driven into the moral nature by outward applications of force. Even if the heroic deed be done under this outward stimulus, it proceeds from fear, and is not heroism, but cowardice.

NEEDLESS REFUSALS.

BLIND obedience, simply because power is vested in the parent, is not a reliable foundation for future character. That this is necessary, in a degree, cannot be denied. Children must be protected from evils they are too young to comprehend, and simply by absolute command can they be shielded. There is a method that atones for this even, — to teach that the requirements of obedience are exacted by love, for their best good, and whenever it is possible, give a reason, and duty will quickly become pleasure. To obey intelligently creates a love of right for right's sake.

How often a chance sentence is impressed upon the mind, returning again and again, each time with added force. A morning's visit: the hostess young (her surroundings an evidence of protection andluxury), with a sweet face, save for the blight of discontent that shadowed it. "Tired? I am always tired," was the reply to kind inquiry from her guest. "I believe there is no position so trying to strength and nerves as a mother's; children are so persistent, such tyrants!" The woman who was the listener to this assertion was much older, her soft hair turning to silver, her thoughtful face stamped with the seal of peace. In a reflective way she said: "If I had my life to live over, I would do so differently, but in my young days I did not know how."

The discouraged young mother exclaimed: "You! If I could be half what you have been to your children, it would satisfy me. What have you to regret?"

Again the friend said: "You will be surprised when I say that I consider mothers responsible for the tyranny (as you term it) of little children. If I had my flock of men and women in pinafores again, I would be more just to them."

At this moment the "tyrant" of the household appeared, and very fair and innocent he looked, notwithstanding his reputation as a despot. Little "Lord Fauntleroy" type, with every advantage of toilet to enhance the beauty of his three years. Regardless of silks and laces, he threw his arms round his pretty mamma's neck, kissing her over and over, to be met with "Harry, you will ruin my gown, run away and play!" (Alas! what would be a spoiled gown to hearts that are faint for clinging arms, for kisses that can never again be given?) Again the door opened, and the clear little voice rang out: "Can I have Johnny to play with me?"

"No, you cannot, and do not disturb me again," was the quick reply.

Only a partition divided the two nurseries; in each a nurse-girl kept watch and guard over accidents or whatever might befall. A very innocent request surely — the companionship of merry little "Johnny" next door.

The conversation was renewed, when once more appeared the disconsolate baby with the petition: "Mamma, can Susan take me in the square? it's buful sunshine." Exasperated at the interruption, the favor was not granted, and the little fellow banished with threat of penalty if he returned. "What

shall I do, mamma?" was the weary question as the door closed on the disappointed suppliant.

She of the tea-gown exclaimed: "You can see how it is, I never have a moment I can call my own."

"I wish I could help you, my dear," said the friend, "and to talk a matter over sometimes smooths the difficulty. Will you tell me why you refused the visit of Johnny?" After a moment's thought the mother replied: "I suppose I had no reason, except that they are noisy and litter up the playroom and get out all the toys, making Susan cross when she is obliged to put them away." Gently the visitor inquired: "What is Susan's position in this house?" "She is Harry's nurse, and nothing else is required of her," was the answer, with a look of awakening in the sweet eyes.

With ample remuneration for her services, and the many added perquisites that fall to the lot of care-takers of children, the social side of life is denied the darling of the household; the toys purchased for his amusement remain on the shelves until such time as Susan's amiability is equal to the emergency of restoring order out of chaos; walking in the sunshine was denied from some cause equally frivolous.

Is it not wise to consider whether there is sufficient reason for refusing a request? if not, then grant it as if a personal favor, and the child will enjoy it doubly, assured of his mother's sympathy in his happiness.

If the reply must be negative, then make it at once decisive and without possibility of change. If this course is steadily and firmly pursued, the tyranny of childhood will end.

Mother-love would be indignant at the suggestion that selfishness was too often the cause of interference with the desires and plans of children. How familiar the answer, "Oh, go away; I cannot be bothered with you," when the pages of a pleasant book or some bit of fancy work absorbed attention, and it would take too much time to attend to the details of permission.

The mother who takes this course is also prone to change her mind, under pretense of entreaty and the annoyance of interruption, "Yes, do go and leave me in peace." The next time "Johnny" knows his woman, and accepts no more negatives without a siege, and comes off victor nine times out of ten.

Are not mothers responsible for much that is charged to childhood? Foolish indulgence (often harmful) is lavished upon the nursery darlings while the simple, innocent wishes of the young life are repressed and denied because "it is too much trouble," "Susan will be cross," etc., etc.

Let the rule be to say, "Yes," unless the negative is a positive necessity, and then give the reason and express regret at the forfeited pleasure. When the memory of "mother" and "home" come amid the trials and crosses of after-life, a happy, merry childhood will be counted among the blessings time cannot change or dim.—*Sel.*

WEARING VEILS.

No thoughtful person can give his attention to the subject without being made aware that there is one common addendum to a little child's toilet which is not only useless, injurious, and foolish, but an absolute piece of cruelty. This is the custom of tying up his little face, which so greatly needs the breath of heaven's fresh air, in a veil. This veil is not seldom a piece of crochet work with closely conjoined wooden needles, and underneath its suffocating pressure the baby, usually lying flat on his back, breathes over and over again his own fetid breath, and is taken into the house, after an hour or so of this unwholesome bath, by his complacent guardian, who congratulates herself that the baby has neither taken cold nor injured his eyesight.

Let us confront the truth. In the majority of instances he has done both. He came forth to be out of doors, to be fortified by a single hour's sunshine and air for the long weary confinement in rooms befouled with all the poisons we live in from day to day without realizing how uncomfortable we are. And instead of the refreshment he ought to have had, he has merely been half smothered and half blinded.

When the veil is of tissue or barege it is fully as bad an imposition. Let the mother who is in the habit of equipping herself with one of these nuisances, recollect how careful she is always to adjust it so it shall not press tightly against her nostrils; and how she raises the edge above her upper lip so that the wind shall not glue it to her mouth and convert it into a wet blanket, unpleasant to the taste.

Then let her look at her baby, strapped in his carriage like a little mummy, arrayed for his "airing." The grey or blue veil completely envelops his head and comes down to meet the collar of his cloak; it is drawn tightly over his face in one spot

and hangs in wrinkles in another; his long eyelashes, crowded and imprisoned, stick through the silken tissue so that it is with the greatest difficulty that he can wink. As he is reclining nearly flat upon his back, this silken fetter settles down more and more closely against his face and is sucked into his mouth till the lower part of it is nothing but a wet rag. He can see nothing of the beautiful world; everything is hazy and ghastly, for baby's sight is not keen like ours, and he has to learn how to use it. Shrouded and shielded from the light and air, the little victims are dragged along our thoroughfares; and might almost as well be at home for all the pleasure or benefit that comes to them.

The superstition that causes this premeditated cruelty seems to be the fear that mothers have that their babies' skin will be injured by the cold air, even if their eyes escape, and mother Nature does not strike them with catarrh when they look upon her barefaced. But this is very thoughtless reasoning.

The alternation of veil and no veil will cause chapped skin, but when the face is accustomed to direct contact with the air, no harm will ensue which the application of a little cold cream or vaseline camphor-ice will not remove. In very windy weather the carriage should be kept with its back to the wind, and the nurse ought to be kind enough to skillfully interpose her own person between the baby and the sudden gust that sweeps around the corner. In Canada and the lake regions of the West, where even adults have to run to keep warm, a veil may be a necessary evil at times, but in the comparatively mild winters that prevail in our Middle States it is an inexcusable piece of foolishness.

The babies are not the only sufferers from this folly. Their brothers and sisters of two, and so on up to the school period, when they usually make a protest for themselves, are likewise screened from the delicious cold air that is like a benediction to clogged skins and fretted nerves. As they waddle along — too muffled and weighted to run — they are prevented from enjoying life by being compelled to see it through this intervening cloud. "How would you like to play tag with a mask on?" demanded a four-year-old boy when his doting mother would have tied up his delicate blonde complexion in a blue barege veil. He rebelled vehemently and was emancipated, but his more docile sisters had to take their constitutionals like little prophets of Korassan. Many others are in the same plight. May this protest be the means of at least influencing the mothers to consider the matter of their release. — *Childhood.*

THE RELATION OF FOOD TO MORALS. — The food that a little child eats has a two-fold influence; it may not only deprave the appetite, but cloud the intellect. It may do more than that; it may inflame the passions, and pervert the moral nature. Our worthy contemporary, *Demorest's Family Magazine*, contributes the following regarding the truth of this principle.

A clergyman who had thought much upon these subjects tells of a father who was sorely tried over his little son. The child was so obstinate and wayward that the father sought counsel of his minister. He asked what he should do with the boy. He had tried everything he could think of, — moral suasion, entreaties, and he was about to resort to force. But nothing seemed to reach the case; the child was incorrigible. The good clergyman had evidently met such cases before. He asked the father how he fed the child; and he learned that its dietary was of a kind that would naturally overheat the blood and inflame the passions. He prescribed an entire change in the boy's food; instead of meats and gravies, rich pastries, and the like, he substituted plain bread and milk, with wholesome fruits.

A short time afterward he called, and asked as to the results. The father informed him that his son seemed entirely changed in his disposition; from being irritable, he had become docile. The congestion at the base of the brain had been relieved, and the intense nervous irritability no longer existed. To the father this sudden transformation seemed almost miraculous. To the minister it was all very plain; he had removed the cause, and the effect no longer followed.

AN interesting bit of news comes from the Brooklyn *Eagle*, of recent date, to the effect that Miss Marsh, the principal of a private school for girls at Dobbs Ferry on the Hudson, has made it a condition of admittance that all the pupils shall wear, during the hours of recitation and study, a suit consisting of a short skirt and an easy, comfortable waist, devoid of corsets. At the close of each day's school session, she allows the girls to go to their rooms and don more fashionable apparel, with corsets, if they please. The sensible teacher wisely argues that the change thus made will eventually be a permanent one; for, as she says, she has no fears that the girls will resort to tight-boned waists after they have enjoyed the freedom of more sensible clothing.

RECIPE FOR A HAPPY DAY.

TAKE a little dash of water cold
And a little leaven of prayer,
And a little bit of sunshine gold
Dissolved in the morning air.

Add to your meal some merriment,
Add a thought for kith and kin,
And then, as a prime ingredient,
A plenty of work thrown in;

But spice it all with the essence of love
And a little whiff of play,
Let a wise old book and a glance above
Complete the well-spent day.

— *The Housekeeper.*

A WORD ABOUT YOUR BOYS.

TREAT your boys as though they were of some importance, if you would have them manly and self-reliant.

Be careful of the little courtesies. You cannot expect your boy to be respectful, thoughtful, and kind, unless you first set him the example.

If you would have your boy make you his confidant, take an active interest in all that he does. Don't be too critical, but ask for his views and opinions at all times.

Don't keep your boys in ignorance of things they should know. It is not the wholesome truth, but the unwholesome way in which it is acquired, that ruins many a young man.

Don't act as if you thought your boy amounted to nothing, nor be continually making comparisons between him and some neighbor's son to his disadvantage; nothing will dishearten him quicker.

Don't think that anything is good enough for the boys, and that they don't care for nice things. Have their rooms fitted up as nicely as possible. Let them understand that their rooms are to be kept in order, and the result will justify your pains.

Furnish your boy with good, wholesome reading matter. Have him read to you and with you. Discuss with him what you read, and draw out his opinions and thoughts upon the subjects. Help him to think early for himself.

Make home a pleasant place; see to it that the boys don't have to go somewhere else to secure proper freedom and congenial companionship. Take time and pains to make them feel comfortable and contented, and they will not want to spend their evenings away from home.

Pick your son's associates. See to it that he has no friends that you do not know about. Take an interest in all his troubles and pleasures, and have him feel perfectly free to invite his friends to the house. Take a little pains to make him and his friends comfortable and happy in his own home. He will not be slow to appreciate your kindness.— *The Mother's Companion.*

TEASING THE BABY.— "We all love papa, except baby. Baby does n't care for papa at all!"

"Yes I do! do I, papa!" says the tremulous little pipe, as if the charge were as new as terrible.

We always smiled at the quaint phraseology, and the prick of the accusation never failed to call forth the protest in the self-same terms. Looking back, now that the sensitive little heart will never ache again nor the loyal lips cry out against the unmerited slur, I can see what deadly earnest the trifling was to the child. Devotion to papa was part of her religion; doubt of it was sacrilege. The evidence of her passionate attachment was interesting to us, and flattered the object. The instant flash of indignant denial diverted those to whom her trial by fire was no more than the explosion of a toy-rocket.

The cruelest teasing is that which takes effect through the affections. Baby is all emotion; his heart throws out feelers through every sense. The truth that he loves and is beloved in return makes his world. Be careful, then, how you utilize moral antennæ as the levers to accomplish ends of your own. Like unattached tendrils, they wither and drop off soon enough with the growth of the physical and mental man. While they are alive and sentient, treat them tenderly. Do not tell your child that he does not love you for the sake of hearing him deny the charge. Let banter find other food than his preference for this or that playfellow. Teach him that love is divine always and everywhere, and show how honestly you prize and reverence it.—*Marion Harland, in Babyhood.*

KEEP UP WITH THE CHILDREN.

THERE is in every community a class of people who seem incapable of receiving any education outside of their own limited experience. Life runs along easily enough for them until their children grow up and begin to look forward to something broader for themselves. Then the battle for supremacy begins in earnest. The child seems ungrateful to the mother and the mother seems tyrannous to the child.

It is very hard for a mother who has laid down precise ideas of how her life and belongings shall be arranged and finds that life fails to arrange itself according to her plans, to discover that her own daughter is one of the chief opponents of her ideas. And yet this is exactly what happens to the woman who fails to learn. Progression is a law of the universe, and one who attempts to retard its wheels is sure to be crushed beneath them. There is something pitiless in the power that so often carries the child so far beyond the parent.

A great deal has been said of the duty of children to their parents, when every thinking man and woman must recognize that the chief obligation is due from the parents to the children. One obligation is to keep abreast of the times with the child, so that the parent shall be a mentor in times of need — a safe, unfailing guide and companion; not an incubus. To do all this is to fulfill in the highest sense the trust which heaven has laid upon parents. —*Sel.*

SOME NEW BREADS.

FROM THE EXPERIMENTAL KITCHEN OF THE SANITARIUM COOKING SCHOOL.

Rye and Indian Puffs. — Measure and mix together thoroughly two thirds of a cup each of rye meal and cornmeal and one teaspoonful of sugar. Beat to a stiff froth the white of one egg. In a mixing bowl beat (not stir) well together one cup of good milk and the yolk of the egg. Sift in the meal rather slowly, continuing the beating some minutes. *Fold* in quickly the beaten white, and when this has been done, turn into heated (not hot) iron cups, like those shown in the cut, and bake in a moderate oven at least forty-five minutes; one hour is better.

Hominy Crisps. — Take a portion of hominy (home made, or hulled corn is just as good) which has been cooked until it is soft and quite dry, sift through a fine colander, make it very stiff with whole wheat or Graham flour, knead well, roll very thin, puncture thickly with a fork, cut in squares, and bake quickly. Perforated baking tins are best for this purpose.

Water Breads with Eggs. — Beat together until all of a foam, the yolk of one egg and one third of a cup of very cold water. Into this incorporate flour enough to make a dough which will clear the board without dusting with flour, but not so stiff that it will be difficult to form into the required shapes. Work it so thoroughly by beating with a hammer, pulling, stretching, picking, wringing, or twisting that breaking off a piece will cause a sharp, snapping sound. Make up in the same way and size as for raised biscuit, make an indenture by allowing the thumb and finger to meet in the center. Place on perforated tins one inch apart, and bake one hour in an oven of a temperature right for raised bread. The dough may be formed into rolls or sticks, if preferred.

A very excellent crisp may be made by rolling the dough to about the thickness of a knife blade, pricking closely with a fork to prevent blistering, cutting in squares, and baking quickly.

The same preparation, treated as above, only left thicker, makes an excellent cracker.

Roll two sheets of this dough so they shall be of the same size and shape, spread chopped dates or figs on one sheet, and cover with the other. Press them together with the rolling pin, prick with a fork, cut in squares, and bake on perforated tins. This makes a very palatable fruit cracker.

The material used for these breads should be as cold as practicable, and the breads will be all the better if placed in the refrigerator near the ice, to become perfectly cold before being put in the oven.

D. A. F.

THE WET- OR DRIPPING-SHEET RUB, AND PAIL AND DIPPER POUR.

THE wet- or dripping-sheet rub is a very pleasant and simple method of taking a tonic bath for the purpose of increasing the activity of the skin or reducing temperature. The appliances needed for giving the bath are few and simple: A foot tub or pail containing about twelve inches of water at a temperature of 102° to 104°, in which the patient may stand; a pail containing three or four quarts of water at a temperature of from 75° to 90° into which a sheet is dropped, folded in such a way that it can be taken hold of by the upper edge and easily and quickly wrapped around the patient without squeezing or wringing, if a dripping-sheet rub is desired, and partially wrung if only a wet-sheet rub is required. The foot tub or pail first mentioned above, in which the patient is to stand, may be set in a wash tub to secure protection for the floor. It is usually preferable to have the attendant stand behind the patient when applying the sheet, unless the patient himself is to assist in the rubbing, in which case the sheet may be adjusted by the attendant standing in front of the patient and placing the sheet so that the upper border will come just under the arms, and crossing the corners at the back, bringing one corner over each shoulder, and tucking them under the edge of the sheet in front. This leaves the arms free, and if the patient is strong enough, he may assist in the rubbing. The rubbing should be very vigorous in order to bring the blood to the surface, and thus secure good reaction.

In persons with sluggish surface circulation, torpid liver and bowels, and a tendency to take cold easily, this bath is very useful as a means of educating the skin to undergo sudden changes of temperature and react quickly, so as to protect the internal organs from undue and prolonged congestion and the diseases likely to result therefrom. It is also very useful in reducing high temperatures and in all cases of acute disease in strong persons. In these cases water may be poured over the sheet from a pitcher or dipper, whenever it is desired to get more of the cooling effect of the bath. Weaker patients may lie on a cot covered with oilcloth, the foot a few inches lower than the head, and the end of the oilcloth hanging in a tub which receives the surplus water.

The dripping-sheet rub is a very useful tonic bath after a hot blanket pack, Turkish bath, Russian bath, full bath, or any other hot bath. It tends to establish proper reaction, and thus prevents taking cold afterward.

Dr. H. A. Hare, in his recent medical work entitled, "Practical Therapeutics," says that he has found the dripping sheet one of the most useful hydropathic procedures in cases of incipient consumption.

The wet-sheet rub is useful in cases of chronic nervous disorder, causing sleeplessness, and in cases where there is cold, bloodless, clammy surface of the skin, and when the patient is excited, irritable, overheated, or tired. If taken just before going to bed, it will often induce sleep, and give tired nature a chance to recuperate. It also tends, like all tonic baths, to increase the action of the eliminative organs, as the skin, liver, and kidneys. If there is danger that a good reaction will not be secured, the patient may take a dry blanket pack for twenty minutes or half an hour, or a brisk dry shampoo may be given before the bath, always being sure that the patient's feet are warm and keeping up a brisk rubbing both before and after the sheet is removed. This bath should always be of short duration, from one to four or five minutes, unless it is intended to reduce temperature. After the bath, the patient should be thoroughly dried and given an oil rub.

The pail pour is a useful procedure for cooling the

patient off after any hot bath. It may also be used after sweating or becoming heated from over-exertion. To take the pour, the patient stands as for a dripping-sheet rub, in a warm foot bath, or may sit on a small stool placed in a tub. The attendant, having previously prepared three or four pails half or two thirds full of water of different temperatures, say 92°, 85°, 80°, 75°, begins with the highest temperature, and standing behind the patient, pours the water close up to the neck, first over one shoulder and then the other, so that it will run over both front and back at the same time, then quickly following with the second, third, and fourth pails, and lastly rubbing off quickly with a Turkish or crash towel. After dressing, the patient may take gentle exercise or lie down for a time. If the patient is rather vigorous, a more tonic effect may be secured by dashing the water on the patient or standing on a stool and letting it fall on him from above. This could only be done in a bathroom with a tile floor. This bath may be used as a tonic for the weak and nervous, and also as a cooling bath in fevers.

In cases of fever the pail pour combined with the dripping-sheet rub, may be given while the patient is lying on a cot covered with oilcloth. If there is a weak, relaxed condition of the abdominal walls, or in a case of torpid liver, the patient may lie on the back, the attendant pouring the water from such a height that it will strike over the torpid organ with some force, or hot and cold water may be dashed over him.

The dipper pour is a milder application than the pail pour, and is especially useful as a local bath for an irritable spine, an inflamed joint, due to recent sprain or bruise, or in cases of swelling with effusions, or of old adhesions, the result of sub-acute or chronic inflammation. In cases of threatened bedsores, where the circulation of the back has almost ceased from weakness and long-continued pressure, the dying tissues may be revived by continued pouring of hot water, 110° to 112°, down the spine, or the alternating of hot with cold, five or six dipperfuls of hot water and one of a temperature of 50° or 60°. The patient may be laid in an easy position on his side on the oilcloth cot, and the treatment may be given for twenty minutes or more, the hot and cold alternating as directed. This treatment may be repeated several times a day. Patients who are threatened with bedsores are always very weak, and this treatment can be given without subjecting them to any over-exertion, and will not only improve the circulation of the back, but also the functions and nutrition of all the other organs of the body.

To treat an irritable spine, seat the patient on the stool in the tub, and pour down the spine from a dipper either hot or cold water as is most soothing to the patient, or, as will be found to be more sedative in the majority of cases, use hot and cold alternately, 112° to 115°, and 70° to 65°.

In treating an inflamed joint, use hot water when the injury is recent and before engorgement has taken place or it has become hot and irritable. After this, cold, or hot and cold, will often give the most relief. In all chronic cases the hot and cold pouring is the most useful in stimulating absorption and reducing the swelling and stiffness. In chronic cases, the pouring should be combined with gentle rubbing and passive movements. The stimulating effect of the dipper pour may be increased by pouring the water from some distance above the injured member, which may be laid in an easy position on a low stool in a tub, or over any suitable vessel for receiving the water. A dipper and two pails of water of widely different temperatures should be at hand, and the treatment may last from ten minutes to half an hour.

THE so-called growing pains of childhood are often in reality the first symptoms of rheumatism, and may result in serious organic disease of the heart or some other important organ. They most often affect the legs, and can usually be cured by proper clothing, keeping these useful members dry and warm.

IN the sickroom the nurse should act as if she meant and were sure of accomplishing something. By her manner and her method of nursing, she should manifest her faith in what she is doing to relieve the patient. A discouraged, doubting patient and a nurse in the same condition are a bad combination, and are likely to counteract the effects of the best remedies prescribed by the physician.

BABIES often suffer a great deal, and in after life are afflicted with bunions and corns and other deformities of the feet from wearing badly fitting and tight shoes. The little one's complaint is too often silenced, and the mother goes thoughtlessly on her way without realizing the cruel martyrdom she is subjecting her child to. When the little one complains of discomfort, an investigation should be made, and if there is reason for the complaint, the defect in the garment should be remedied, or else it should be discarded at once.

PROPER METHODS OF DRESSING SMALL CUTS, LACERATED AND CONTUSED WOUNDS, AND MODERATE BURNS.

ACCIDENTS are liable to happen in any family, and wounds thus caused may, for lack of proper dressing, become infected with disease germs, and result in needless pain and discomfort, unsightly scars, and even more serious consequences, as the crippling of the injured member. In every clean-cut wound the hemorrhage should be stopped, the wound thoroughly cleansed, and the edges brought together by adhesive straps or stitches and covered by a bandage. Stitching is usually the best method in incised wounds. Warm or even hot boiled water, either with or without some disinfecting solution added, is the best cleansing agent the writer has ever found for these cases for preserving the vitality of the tissues, arresting the bleeding, and for cleansing. The simplest and most easily applied antiseptic for preventing wound infection is a powder composed of equal parts of powdered boracic acid and subcarbonate of bismuth.

To illustrate: A young lady while cutting bread, sliced off a portion of the side of her thumb, involving about a third of the nail. Doing up the wounded member in a rag, and taking the amputated portion in the other hand, she started for the physician's office. Here the wounded thumb was thoroughly soaked in sterilized water as hot as could be borne until all bleeding had ceased, the cell life of the amputated portion meanwhile being preserved by immersing in a cup of the same hot aseptic water. This was then neatly adjusted, and held in place by a narrow bandage made of antiseptic cloth, and over the whole was bound the aseptic dressing of cotton and powder. In a week's time the amputated portion was all united except the nail, and the patient had had but little pain or discomfort from it at any time. The wound never required a second dressing.

Another illustration: A carpenter had just placed his hand on a pine board when a plank from the scaffolding above fell upon the thumb with such force as to drive it into the board and apparently mash it into jelly. The hot water was used in this case, and the disabled member, after being well soaked and cleansed, was pressed into something like its natural form, and encased in a thick coating of the powder, wrapped with absorbent cotton, and firmly bandaged. The tissues were lacerated in many places. The patient was ordered to keep the hand in a sling for a few days, but it being his left hand, and he being very anxious not to lose his time, he went right on using the hammer with the other hand and assisting as he could with the wounded member. After the first dressing, the thumb never gave him any more pain. It needed only the one dressing, and healed without any symptom of inflammation or swelling.

Again: A little child taking its bath got against a hot stove pipe and received a large surface burn which was partly whole and partly broken blisters. The use of hot water and cleansing were the same as in the other cases, except that the water was allowed to drip on the burn from a clean rag. The wound was covered with powder, with aseptic lint over that, and the dressings were held in place by adhesive straps, as it was in a portion of the body on which it was hard to keep a dressing. In a few days the wound had healed, and the little one had suffered no pain or discomfort after the first few hours. This simple powder protected the wound from infection, and nature did the repairing.

A roll of clean lint aseptic bandages and a box of the powder kept where they will not become contaminated with dust or other dirt, and the use of boiled hot water, would make domestic surgical nursing a blessing to many a little one, and relieve a great amount of needless physical suffering.

WHEN a child is ailing, always take its temperature and examine its throat. That dread disease, diphtheria, which works such havoc among young children, often develops insidiously, and may be so far advanced before the little one complains of throat symptoms that nothing can be done for it, and death results in a few hours.

IF the baby frets and cries while nursing, often dropping the nipple, always examine its mouth. The gums may be inflamed from teething, or it may be suffering from thrush or some other disease of the mouth, which requires treating with a borax wash, a teaspoonful of borax to an ounce of water. Wash the mouth both before and after nursing, with a swab of clean cloth, using a new cloth each time.

ALWAYS isolate a sick child from the nursery. It is better for the patient to be quiet, and if the disease should prove to be contagious, the other children might thus be spared, by avoiding contact with the infection.

PROPER EXERCISE FOR CONVALESCING CHILDREN.

DURING convalescence, physical exercise should be gradually resumed, avoiding undue haste. Exercise in moderation, and proportioned to the strength, increases it by stimulating its repair; immoderate exercise, on the other hand, exhausts it. The former conduces to sleep, while the latter produces wakefulness and an unpleasant state of nervous erethism. There is, if I may be allowed the expression, an *indigestion* of motion as well as an indigestion of food, each having its own dangers.

The heart is particularly excitable in children who have passed through a long course of sickness; it beats more forcibly and more rapidly. Fatigue, at such a time, may transform transitory disorders into permanent troubles. Many a case of organic disease of the heart has thus originated. We should take special care to avoid this risk whenever (as is almost always the case) convalescence occurs at an epoch of rapid growth. I have already stated that, at such times, we should be particularly careful in regard to the heart.

The passive exercise of the carriage, leisurely walking, and certain games in which moderate activity is combined with pleasure, readily admit of graduating exercise, which cannot be too moderate. If the child becomes pale and covered with perspiration, if his eyes become circled with black, if there is a disposition to sleep after the exercise, the limit has been exceeded, and we must retrace our steps.

Convalescence is a sort of re-creation: the functions are trying their strength, the organs have an unaccustomed tenderness, ordinary exertion fatigues or exhausts them. We must treat it with infinite caution, allowing nothing to agitate the senses, and especially the intellect, the forced action of which should be suspended for a time.

Convalescent children should not be too much urged to play, but should be left to their own inclination, with their accustomed toys, without plying them with new ones which may excite them. Each parent and every friend lays an Esculapian cock upon the little bed which has been the scene of a drama happily terminated: dolls, jumping-jacks, surprise-boxes, sonorous instruments, all accumulate, and the poor little brain yields under so many impressions.

Then come questions without number; we must needs make him talk, revive his mental development, hitherto clouded, enjoy his repartees, go into ecstasies at his every word, and once more take possession of the dear one who is still with us, and whom we are resolved to guard carefully, but who yesterday seemed as if he were about to die.

All this is touching, and even we physicians, sinking for an instant our proper part in that of the father, sometimes suffer ourselves to take part in this sweet and noble emotion. Sympathy invites to it, but reason dissuades. Rest and more rest is the necessary hygienic formula in convalescence. There should be no ill-timed display of feeling, nothing to excite the child's emotions; but we should allow of the undisturbed formation of that great *scar* of convalescence, to use Bordeu's expressive figure.

Convalescence being well advanced, it is desirable that it should be finished in the country. It is not easily accomplished in a city, and nothing short of absolute necessity warrants the trial.

Finally, we have to meet the serious question of the resumption of work. I shall say but a word upon this point: *mental diet* should follow the same rules with *alimentary diet*. The fatigued brain, which has, some weeks or months since, unlearned its duties, should be suffered to rest for a long time. The return of the general health does not indicate that the mind has recovered its strength; it often happens that the memory has sustained a breach which it will take many months to repair; it resists, and the achievement of the most inconsiderable result demands hazardous efforts.

Prolonged rest is especially necessary after typhoid fever. Every physician can call to mind the remembrance of the sad consequences of a too hasty resumption of study. The mother, therefore, cannot too closely guard against it. A diminished proficiency in a few matters, with safety, will certainly repay all her trouble. — *Prof. J. B. Fonssagrives, in "The Mother's Work with Sick Children."*

THE community of Sturgis, a small town in Michigan, was recently startled by the annihilation of a whole family by smallpox. The disease was contracted from a towel on which a tramp ill with this dread disease had wiped. The roller towel in common use in too many farm houses, not only by all members of the family, but by the hired men, and by transient guests, is often the source of sore eyes, scabies, and other skin diseases. Always remember there may be germs on the family towel.

GOOD HEALTH
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BATTLE CREEK, MICHIGAN.

THE DISINHERITED.

A PHILOSOPHER has said, "It is the greatest of all human felicities to be well born." Unfortunately, not all human beings enjoy this felicity. Indeed, it is yearly becoming more and more apparent that an increasing proportion of human beings are badly born. In every large city are to be found thousands who belong to what are known as the vicious, the criminal, or the indigent or pauper classes. For the most part, these persons are born into the condition in which they are destined to spend their lives, and are little more responsible for the unhappy situation in which they find themselves than are the deaf and dumb, the blind, or those who are in other respects congenitally deformed. The only difference between the infirmities from which these persons suffer and those with which the cripple, the blind, or the deaf are afflicted, is that their physical deficiencies are less conspicuous. They are, nevertheless, as real. For the most part their deformities consist in bad or abnormal construction of the brain, although a minute examination will reveal, in the majority of persons belonging to these inferior classes, external deformities of a very pronounced character.

Another class of deformities which may be recognized, perhaps more commonly among the so-called "upper" classes, include such congenital defects as flat or narrow chest, weakness of the heart, feeble digestive powers, a neurotic temperament, and various idiosyncracies of mind and body.

That these weaknesses and abnormalities of body and mind are perpetuated by heredity, is no longer a question upon which there is any difference of opinion. It is as clearly settled that mental and moral characteristics are inherited as that the color of the hair and eyes, or other physical characteristics, are thus derived. It is equally true, although the fact is often forgotten, that the resemblance of the internal structures of the child to those of his parents is as close as the likeness which can be traced in the external features. Heredity is a force which operates in the most thoroughgoing manner. Every human being is the product of a principle which has been taking careful notes of the lives and habits, the neglects, the excesses, and the abuses of every crime against the body through all the generations from Adam down to the individual man in question. The living man or woman is simply the material representation, the focus or vortex, so to speak, of the myriad of influences which have been operating from the earliest ages of man's history down to the moment of inspection.

Man's physical, mental, and moral character is as much a matter of heredity as is the capital of wealth with which he starts out in life. The man who lives the life of a spendthrift and dies bankrupt, leaves his children penniless. Sometimes it takes a series of generations to consume completely the accumulated earnings of preceding generations. So it is with bodily and mental health. The complete mental and physical bankruptcy which lands a man in the insane asylum or an almshouse infirmary, may be simply the result of two or three generations of sins against the body and the soul on the part of profligate ancestors,— "The fathers eat sour grapes, and the children's teeth are set on edge."

The world looks with disdain upon the money spendthrift. The man who recklessly squanders the family inheritance and leaves his children penniless, is regarded by the world as little short of a criminal, a thief, a robber. What does society say about a man who by a process exactly identical, disinherits his children of that most valuable of all possessions —soundness of body and mind? Society ignores the sins of this class of criminals, never asking a man to consider the consequences of his course of life upon his possible progeny, but allows him to

squander, without questioning his right, the constitutions of unborn children, in open violation of the law by which nature has protected the wellbeing of the human race.

Through this almost universal ignoring of the duty devolving upon every human being to preserve intact, as far as possible, the natural powers transmitted to him from his ancestors, and by training and painstaking development make the most of them, we find the human race deteriorating in physical stamina and a rapidly growing multitude of "disinherited" individuals who are born into physical, mental, and moral bankruptcy. It is high time that society gave more serious attention to this great class of bankrupts by heredity, from which springs the greater share of crimes and criminals, cranks, lunatics, fanatics, and imbeciles.

A searching inquiry into the causes which lead to this disinheritance, and through which the race is rapidly sinking into physical oblivion, should be undertaken and assiduously prosecuted.

THE SAVAGERY OF CIVILIZED LIFE. — Probably no one who has made a careful study of the different phases of development in which history presents human nature, has failed to observe unmistakable traces of a savage state still existing, even in the members of the most civilized communities. The degree of emancipation from savagery differs with different nations and with different individuals, as does also the direction along which the greatest progress has been made. This thought is recognized and well expressed in an article by Mona Caird which recently appeared in the *Westminster Review*, from which we quote a few lines as follows: —

"In modern life we see a sort of dual conscience; active as regards human beings, but scarcely awake at all in respect to the other races of suffering creatures.

"On either side of the average man, who constitutes the immediate ruling force of society, we have those below and those above the average. From the one class we get our criminals; from the other, the makers of our new standards. Our aim, then, must obviously be to raise the standards, and therefore the average man, until these have succeeded in holding in thrall and finally extirpating the original savage who still utters his disturbing war-whoop in the heart of our most respectable citizens. We must seek to play upon the more human elements of society so that the desires and ambitions become, on the average, more rational, more beneficent, more fruitful in happiness of the lasting and true sort than are the desires and ambitions of the half-developed being who is now known as civilized man."

Here we find an explanation of the enormous love for so-called "sports" in which the shedding of blood through the killing of innocent animals is the principal feature. Perhaps, also, we have here an explanation of the great appetite for flesh food which is also a characteristic English trait; for the ancestors of the English race were not only savages and barbarians, but were possessed of such an insatiable appetite for flesh that they were even cannibals. When the savage ceases to utter his "disturbing war-whoop in the heart" of civilized men and women, we hope to see the civilized standard respecting the relations of man to the lower animals raised to an equal level with that of the half-civilized native of India, who would as soon think of eating his brother or sister as an antelope or a bird.

POISONING FROM VEAL. — A German physician, Dr. Van Ermengen, recently investigated the cause of an outbreak of gastro-intestinal inflammation involving fifty-six persons, four of whom died. The suspected cause was the flesh of two calves. On investigation it was found that the calves, when killed, were afflicted with a sickness of some sort. Examination of a portion of the body of one of these animals, and of the liver, spleen, and intestine of one of the victims of the poisoning, revealed a germ closely resembling those known to be the cause of hog cholera.

REFUSED TO BE TREATED. — The *National Temperance Advocate* tells of "a woman, Mrs. Sharpe, a performer at West Brighton at a matinee performance at a concert garden, Coney Island, on the 3d ult., who attempted to make a trained monkey drink a glass of beer. The animal drank half of the contents of the glass, and then refused to drink any more. Mrs. Sharpe insisted upon his emptying the glass, when the enraged monkey seized her hand in his mouth and bit it severely. After the monkey was made to release his hold upon her hand, she fainted, was soon attacked with convulsions, and her life was despaired of, the doctor fearing blood poisoning. It was a perilous experiment to try with the monkey, and she paid a severe penalty for her folly. It would be well for many men, and women too, if they shared the monkey's repugnance to beer."

WHY INVALIDS DO NOT GET WELL FASTER.[1]

INVALIDS are often restive under the penalties which Nature inflicts upon them for the willful and long-continued violation of her laws, and they may very appropiately ask themselves whether they have any right to expect to get well at all. Many of them have sold their birthright to health for something to gratify the palate, as did Esau. The majority of people inherit a sufficient degree of health to enable them to live comfortable lives if they would only take care of themselves. But they squander their birthright for pleasure, and then what right have they to complain when they find themselves bankrupt? — Just the same right to complain which the free boarders in jail have because they have not the liberties of other citizens. There is a way by which, by doing works of supererogation, prisoners who have violated the civil law can shorten their sentences; and in like manner, by extra good care, those who have violated the laws of health can hasten their release from the bondage of disease.

There is within us an inherent force of nature, something like the still small voice which helps us back to the right, that serves to help us back to health, provided we follow its directions. This creative force within the body was styled by the ancients, the *vis medicatrix naturæ*. We do not get well by virtue of medicines, but by the recuperative power of nature. This is difficult to understand, and so also is the hidden force in the acorn from which springs the oak. The invalid who has nearly exhausted his reserve capital must necessarily move slowly upon the road toward health, while one who has a large amount of unused *vis medicatrix naturæ* will recover rapidly.

This is the true philosophy of getting well, and all the physician can do is to supply favorable conditions, tell you what you have been doing that is wrong, and how you may set about doing works of supererogation. The healthy person may eat some sweets without particular harm, but the poor dyspeptic whose stomach and liver are all out of order, must avoid them, and give his digestive apparatus as favorable conditions as possible. So attention to diet is necessary.

Another thing which should receive attention is physical exercise. A leisurely stroll without aim is not worthy to be called exercise. To get the full benefit of it, one should walk off briskly with a firm, quick step. Gymnasium work should be practiced faithfully for an hour or two every day. The muscles should be exercised until they are tired. Nature will not build them up unless she sees there is a necessity for it. Let a patient use what muscular strength he has, and nature will give him more. A father would not be likely to give his son further capital when the half of what he already had was lying idle. He would be more likely to tell the young man to use well what he had, before he could be trusted with more. Nature is even more prudent. Unused muscles always degenerate. When one first begins to exercise, the muscles become lame and sore, but by careful regulation of the amount of exercise, and a systematic course of training every day, the lameness will wear off, and the useless muscles will become firm and healthy. Exercise will raise the lowered nerve tone and increase vitality. Cultivate health, and disease will disappear of itself.

POPCORN is a very wholesome article of food, and can sometimes be digested by a stomach that cannot digest anything else. It should be eaten at mealtime, the same as any other food.

[1] From a lecture in the Sanitarium parlors.

MILK FOR INFANTS.—Several interesting facts have been developed by modern investigation in dietetics, bacteriology, etc., which are of value in relation to the feeding of young infants. Dr. Meigs some time ago introduced the custom of dividing the milk in the following manner: —

As soon as received from the cow, the milk is put in a deep but rather wide-mouthed vessel, which is covered and allowed to stand in a cool place for three hours. The top half of the milk is then dipped off with a cup or ladle. Dipping is found to be better than decanting, as the latter method mixes the milk. In the babies' ward, in the Post-Graduate Hospital in New York, the milk is separated by placing in a long glass cylinder which is furnished with a stop-cock at the bottom. After standing for three hours the lower half of the milk is drawn off. A chemical analysis of the two portions of the milk thus separated shows that the upper half of the milk contains a larger proportion of fat than the lower half, which of course, would be naturally expected. The proportion of fat is increased about 1.6 per cent, the upper half of the milk containing 5 per cent of fat, while the lower half contains about 2 per cent.

It was long ago discovered that mixed milk was far better for infant feeding than milk of a single cow. The reason of this is that mixed milk is practically uniform in quality, whereas the milk from a single cow is constantly changing with the diet, the amount of exercise, and other conditions under which the cow may be placed. If the cow could receive, in her care, the same scrupulous attention given by parents and others to the wet nurse, of course this principle would not apply, but under existing circumstances mixed milk is found to be much preferable to that from a single cow, notwithstanding the ancient prejudice in favor of the latter. Recent observations show that care must be taken in the feeding of sterilized milk; first, it is important that, when possible, boiling of the milk should be avoided. Long heating and a high temperature change the ingredients of the milk somewhat, and render them less nutritive and less digestible. Milk which requires long heating in order to render it safe, is absolutely unfit for use, since it contains not only the microbes which require the long boiling for their destruction, but also various poisonous substances produced by these germs. The heating of milk to a temperature of 160° F. for fifteen or twenty minutes is sufficient to destroy all germs capable of producing disease. A bottle of milk placed in boiling water, the mouth plugged with cotton, if heated for fifteen minutes, is rendered perfectly safe as far as living germs is concerned. Several heatings of this sort are required, however, to prepare milk for keeping for any considerable length of time. A single boiling of the milk with the bottle tightly stoppered and placed in a saturated solution of common salt or soda, is sufficient, ordinarily, to destroy every germ which the milk contains and render it capable of keeping for an indefinite length of time.

It is found, however, that milk thus prepared is less digestible than when freshly heated at a lower temperature and for a period of not more than fifteen or twenty minutes. It has also been noted that an alkaline fermentation sometimes takes place in sterilized milk when long kept, which renders it poisonous. It is therefore much better and in every way safer to freshly prepare the milk used as food for infants. The Sanitarium Sterilizer is one of the very best means of preparing food for infants, either in using the recipes above given or when milk is employed.

The toughness of the curds formed by cow's milk is one of the principal causes of the indigestibility of cow's milk, especially when the infant is feeble. This difficulty may be remedied in a very slight degree by simply diluting the milk in water; but in order to render the curds soft and pliable it is only necessary to add some farinaceous material; barley water is one of the best articles for this purpose. The great difficulty with preparations of this kind is the indigestibility of the starch in the case of very young infants. Thorough cooking of the starch obviates the difficulty somewhat. This explains the beneficial effect of the use of the old-fashioned flour-ball made by boiling wheat flour in a bag for a long time.

Sanitarium Infant Food is a very excellent article indeed for this purpose. We know of nothing better. In fact I prefer this food to the malt preparations which have been prescribed. It has frequently saved the lives of infants who were starving from the use of other foods, and who would have died but for the help received from it.

NUTS constitute a healthy article of food, if taken at mealtime with some other hard substance which requires thorough chewing, such as toast or zwieback.

THE FLY NUISANCE.— The *Indian Medical Record* gives the following advice regarding the fly nuisance: —

Expose a little *oil of bay* in a saucer on your window-sills, or coat your doors and windows with any color of paint you like, into which even as little as four per cent of oil of bay has been stirred, and not a fly will enter your house.

ANSWERS TO CORRESPONDENTS.

INFLAMMATORY RHEUMATISM. — A. H. T. asks : " 1. Is inflammatory rheumatism a disease, or a symptom of a disease ? 2. What should be the diet of one suffering from it ?"

Ans. —1. Acute inflammatory rheumatism is a disease. Pain, swelling of the joints, etc., are symptoms characteristic of the disease. Recent investigations show that this disease is due to the invasion of the body by specific microbes, the symptoms being simply the poisonous effects resulting from the toxines or noxious substances produced by the germs.

2. For many years it has been our habit, when we treated cases of inflammatory rheumatism, to prescribe for the first two or three days a diet of water, admitting, at most, nothing more in addition to water than fruit juices, which may be taken *ad libitum*. Granola, gruels of various sorts, fruits, and fruit juices constitute the proper dietary. In this disease, eggs, meat, and all other highly nitrogenous substances should be avoided.

ZWIEBACK — UNFERMENTED BREAD — WATER BISCUIT, ETC. — "A reader" asks the following questions: "1. Is zwieback equivalent in food value to unfermented bread ? 2. Will not the water biscuits prepared by the Sanitarium Food Co. be more likely to ferment in the stomach than would zwieback ? 3. Can any harm result from washing out the stomach with a stomach tube as often as twice a day ? 4. Where can be obtained a table showing the analysis of the different kinds of foods ?"

Ans.— 1. Yes, practically so.

2. No.

3. Yes ; the stomach tube may be used twice a day for a short time, but the practice of using the stomach tube frequently for any length of time is likely to produce serious injury.

4. Such a table as is desired will be found in the "Home Hand-Book," or Mrs. Kellogg's "Science in the Kitchen." The latter work contains a most extensive table, which has been prepared from the most recent German and other scientific sources. Both works are published by the Modern Medicine Pub. Co., Battle Creek, Mich.

CONDENSED MILK — COTTOLENE, ETC.— W. W. C. inquires : "1. Is condensed milk as found in the market, good for family use ? 2. Do you consider N. K. Fairbank's cottolene a wholesome food and to be recommended ? 3. Would you recommend that cornmeal mush be fried in beef suet, olive oil, or cottolene ? "

Ans.— 1. Yes, although we cannot recommend such milk as a staple article of diet on account of the large quantity of sugar which it usually contains.

2. We have had no experience with cottolene. We are informed that this product usually contains a considerable quantity of lard.

3. No. Cornmeal mush should not be fried in fat of any kind. If one insists on eating fried food, it makes but little difference what particular form of fat is used for the purpose, as more injury is likely to be done by the frying itself than by any noxious substance to be found in the material used.

PANCROBILIN — KUMYSS— K. B. L. writes : "Owing to torpid liver and catarrh of the stomach and duodenum, I have been obliged to abstain from the use of milk or fat in any form, and in consequence have wasted to a mere skeleton. Have received a little benefit from pancrobilin. How long could I continue the use of that remedy without danger of toxic effects, or further impairment of stomach digestion ? 2. Have been using kumyss made in this way : Add one fourth cake of compressed yeast to one half pint of new milk, and let it stand in a warm place until it thickens ; then beat smooth, and add one half of this mixture to one quart of new milk, and let it thicken as before ; beat smooth with an egg beater, and place on ice. Do you know of anything superior to this ? "

Ans.— 1. We do not recommend pancrobilin or any of this class of remedies. If used at all, its employment should only be temporary. Experiments made by an English physiologist showed that it weakens the digestive organs if used longer than six weeks.

2. We cannot recommend kumyss made in the manner directed. The yeast and other germs which it contains are likely to produce serious derangements of digestion. The only article of this kind that we are prepared to recommend is that furnished by the Sanitarium Food Supply Company, which is the result of long-continued experiments in the Laboratory at the Battle Creek Sanitarium, and is free from objections. It contains neither yeast nor alcohol, is exceedingly palatable, and very serviceable in many cases of indigestion.

MARCHAND'S GLYCOZONE — PAINT ON GLASS.— J. C. S. asks : "1. Would you recommend Marchand's Glycozone for stomach troubles ? 2. What will take paint off from glass ? "

Ans.— 1. We know of no one remedy that is good for all stomach troubles.

2. Caustic potash.

DIET FOR CATARRH OF THE BOWELS — STERILIZATION OF MILK AND BUTTER, ETC.— H. W. writes that he is troubled with catarrh of the bowels, and asks : "1. Are rolled oats, oatmeal, or any whole-grain preparations, a good diet for me ? 2. Which is the more healthful way, to use milk fresh and warm from the cow, or skimmed and boiled ? 3. Please give directions for sterilizing milk and butter."

Ans.— 1. If there is great irritability of the bowels, as shown by tenderness, frequent movements, painful or bloody discharges, etc., coarse foods of all sorts should be avoided.

2. Both methods are healthful. Whole milk is more nourishing than skim milk.

3. For sterilizing milk you should have a Sanitarium Milk Sterilizer. An outfit for sterilizing milk is furnished by the Sanitarium Food Company for $5.00. Sterilized butter is simply butter made of cream which rises from sterilized milk.

GALVANIZED IRON VESSELS FOR WATER, ETC. — L. J. B. asks : "1. Is water kept in galvanized iron vessels fit for drinking or cooking purposes ? 2. Is hydrochlorate of cocaine the same as muriate of cocaine ?"

Ans. — 1. Yes.

2. Yes.

THE SALISBURY DIET FOR DYSPEPSIA.— S. A. B. writes : "Please give an opinion on the Salisbury diet for dyspepsia and other diseases caused by defective assimilation."

Ans. — After some personal experience with this dietary and studying its effect in cases when employed by others, we long ago became convinced that it is not only an unsuccessful but a dangerous method.

CHLORATE OF POTASH.— C. M. H., who is a clergyman, inquires: "Would the use of one or two tablets of chlorate of potash, taken once or twice every day, before preaching, to clear the throat, be injurious to the kidneys?"

Ans.— Probably not.

PAINE'S CELERY COMPOUND — BURNING PAIN IN THE STOMACH.— Mrs. E. K. C. asks: "1. What is your opinion of Paine's Celery Compound? 2. What is the cause of burning in the stomach? 3. Please give a remedy."

Ans.— 1. We consider it worthless.

2. There are several causes of burning in the stomach, of which the following are chief: Fermentation of food, hyperpepsia, in which there is an excessive formation of gastric juice, ulcers of the stomach, and cancer of the stomach.

3. The remedy must depend upon the disease. A thorough examination requires an investigation of the stomach fluid after a test breakfast. For further information concerning this mode of investigating diseases of the stomach, address, The Sanitarium, Battle Creek, Mich.

TO STIMULATE GROWTH OF BEARD.— A correspondent asks for some harmless recipe the use of which will stimulate the growth of the beard.

Ans.— Rubbing of the skin with cold water several times daily is a harmless remedy and as good as any.

JAUNDICE.— R. B. H. has been troubled for several years with jaundice. He has no pain; eats mostly vegetables, fruits, and grains, with very little meat. The bowels are regular. When the yellow color is particularly noticeable in the eyes, he is very drowsy. He asks: "1. Will drugs of any kind benefit me? 2. Please give advice for home treatment."

Ans.— 1. This patient might be benefited by the use of remedies calculated to produce antisepsis of the alimentary canal,— charcoal or a mixture of two parts of charcoal and one part of sulphur.

2. Fomentations over the region of the stomach and liver on going to bed at night, a cool, moist abdominal bandage worn during the night, another fomentation over the stomach and liver in the morning, and a cool sponge bath, will probably be found beneficial. The diet should be scrupulously hygienic. Meats, cheese, pastry, and all articles difficult of digestion, should be avoided. Great pains should be taken to masticate the food thoroughly. Two or three pints of water should be taken daily. The bowels should be kept open by a large enema if necessary.

"VIAVI."— Mrs. A. E. F. asks our opinion of a preparation called "Viavi," said to be able to cure a fibroid tumor.

Ans.— This is a quackish nostrum in which we have no confidence. A person suffering from fibroid tumor would certainly receive no benefit from its use, and might be seriously injured by delaying to seek relief through some intelligent means.

HONEY — BEST CLIMATE FOR NASAL CATARRH, ETC. — Mrs. M. H. E. asks: "1. Will you please state the effect of honey on the system? 2. What climate would you recommend for nasal catarrh? 3. Is not a warm climate where it rains considerable, bad for the lungs and for rheumatism?

Ans. — 1. The effect of honey upon the system, is, practically, the same as that of other sweets, except when it contains an unusual amount of the poisonous substances gathered by the bees from the flowers, or the formic acid injected into the honey as a preservative, from the poison bag of the bees.

2. There is no climate which is a panacea for nasal catarrh. A warm, dry, equable climate would be an ideal place for a person suffering from nasal catarrh, but, as a rule, both local and constitutional treatment is needed, as well as climatic changes.

3. Yes. Such a climate is unheathful, and hence bad for a person suffering from any disease.

QUININE IN MALARIA — IRREGULARITY OF MENSES.— Mrs. A. C. M. asks: "1. Do you believe in the use of quinine in malarial diseases? 2. If not, what would you advise in its place? 3. What should be done for a girl of seventeen (a working girl) whose menses are irregular?"

Ans.— 1. Quinine is sometimes useful in the treatment of malarial diseases.

2. In some of the worst phases of malarial disease, quinine seems to have had no effect. We have often cured such diseases by vigorous application of sweating baths, such as cold wet-sheet packs, fomentations over the region of the liver, etc., together with careful dietary and copious water drinking.

3. We recommend a daily sitz bath, and moderate daily exercise in the open air.

PEROXIDE OF HYDROGEN.— E. Y. R. asks: "1. Would Peroxide of Hydrogen be safe to use in washing out the bladder?"

Ans.— 1. Yes, if used sufficiently diluted. About one part of peroxide to twenty parts of water would be a suitable preparation.

CANNING CORN.— J. J. C. asks for a recipe for canning green corn.

Ans.— See Mrs. Kellogg's "Science in the Kitchen," published by The Modern Medicine Pub. Co., Battle Creek, Mich.

CHEESY MASSES FROM THE TONSILS.— M. E., Neb., wishes to know the cause of the cheesy particles which collect in the tonsils, and also a remedy.

Ans.—The tonsils are affected by disease in which the ducts of the glands naturally found in the tonsils are greatly dilated. The glandular secretions accumulate in these pockets and undergo decomposition, harboring germs which give rise to frequent attacks of inflammation. The glands and pockets should be obliterated, or the tonsils should be removed.

GLAZED EARTENWARE.— Mrs. A. C. W. writes: "In naming only two wares — porcelain and granite — as suitable for cooking purposes, would GOOD HEALTH exclude as unsanitary the glazed earthenware so commonly used?"

Ans.— No.

INFLAMMATION OF THE STOMACH.— Mrs. M. C. asks concerning inflammation of the stomach: "1. What are its symptoms? 2. What is the proper home treatment, if it can be treated at home?"

Ans.— 1. The symptoms of inflammation of the stomach are heat and pain in the region of the stomach; pain increasing on pressure; tongue coated white, with red edges; and a rise of temperature.

2. The proper treatment is rest in bed and abstinence from food for several days. Nutritive enemata, consisting of eggs, to which a little salt has been added, should be used for nourishment. Such a case requires the care of a skilled physician.

RELIEF DEPARTMENT.

[THIS department has been organized in the interest of two classes: —

1. Young orphan children, and
2. The worthy sick poor.

The purposes of this department, as regards these two classes, are are follows: —

1. To obtain intelligence respecting young and friendless orphan children, and to find suitable homes for them.

2. To obtain information respecting persons in indigent or very limited circumstances who are suffering from serious, though curable maladies, but are unable to obtain the skilled medical attention which their cases may require, and to secure for them an opportunity to obtain relief by visiting the Sanitarium Hospital. The generous policy of the managers of the Medical and Surgical Sanitarium has provided in the Hospital connected with this institution a number of beds, in which suitable cases are treated without charge for the medical services rendered. Hundreds have already enjoyed the advantages of this beneficent work, and it is hoped that many thousands more may participate in these advantages. Cases belonging to either class may be reported in writing to the editor of this journal.

It should be plainly stated and clearly understood that neither orphan children nor sick persons should be sent to the Sanitarium or to Battle Creek with the expectation of being received by us, unless previous arrangement has been made by correspondence or otherwise; as it is not infrequently the case that our accommodations are filled to their utmost capacity, and hence additional cases cannot be received until special provision has been made.

Persons desiring further information concerning cases mentioned in this department, or wishing to present cases for notice in these columns, should address their communications to the editor, Dr. J. H. Kellogg, Battle Creek, Mich.

☞He wishes especially to state that those who apply for children will be expected to accompany their applications by satisfactory letters of introduction or recommendations.]

TWO DAKOTA BOYS (Nos. 201 and 202).— We have received the description of two boys who are sadly in need of a home. They have not known a father's care for six years, and their mother is no longer able to support them. The older, eleven years old, has black hair and eyes; the younger, ten years of age, has brown hair and blue eyes. They have had good training, and the greater part of the time they have spent in the country.

No. 203 is a boy living in Michigan, who is in need of a home. He is eight years old, has blue eyes and light hair, and is truthful, industrious, and obedient. Surely some home will be made brighter by his presence.

ERWIN (No. 209) is a bright, pleasant looking boy only six years old. His father is dead, and the mother is very poor and living among strangers, so the child is left in the world with no friend to care for him. He is now in Michigan. What family will welcome him as one of their number?

ALFRED (No. 213), a boy five years old living in the State of New York, is fatherless and his mother in poor health is left without means of support. He has blue eyes and black hair. Will some home in the Eastern States open its doors to receive this boy while his character is yet unformed?

No. 217 is a nine-year-old boy living in Indiana. He has dark blue eyes and dark hair, is said to be obedient, and has had good care. Last winter his father died, leaving his mother with no means of support, and he has no friends who are able to care for him. Will some family receive him as their own, and still direct his feet in the right way?

No. 218 is a healthy Swedish boy only four years old, living in Minnesota, who has no one to care for him. At the present time he has a temporary home, but he cannot remain in this place long. He has brown hair and eyes, and is said to be an intelligent little fellow. He would surely cheer some home, should a kind mother bestow upon him her love and care.

No. 231 is another Michigan boy. He is but nine years old, and is left in the world with no one to care for him but the county authorities, as his mother is dead and his father has deserted him. He has dark blue eyes and brown hair, and is said to be kind, easily governed, and has fine sensibilities. Who will offer a home to him who is worse than an orphan?

WORD has come from Colorado telling us of a thirteen-year-old boy (No. 232) whose father is dead. His mother desires to place him in some home, but does not wish to give up full control. He has brown eyes and hair, and has not been allowed to run the streets. Will some one offer this boy a home for a few years?

Is there not some good home in the Southern States where a twelve-year-old boy (No. 233) can find parents? This boy's father and mother are both dead, and just at this age he surely needs to be surrounded with good influences and to receive kind advice and encouragement, so that he may grow to be a useful man. He has black eyes, and is said to be intelligent and in good health.

THE guardian of a little girl (No. 234) living in Michigan desires to find a home for the child. The little girl is nine years old, has hazel eyes and light brown hair. She is of a cheerful disposition, and has a good memory. Here is another opportunity for some one to train the faculties of the mind that are yet undeveloped.

NOS. 235, 236, AND 237.— The father of two girls and one boy, ages respectively 12, 11, and 9 years, now living in Massachusetts, is anxious that his children may have the care and training such as only some kind mother could give. He desires that homes be provided for them in the New England States. The children all have dark eyes and hair, are industrious, and have not been neglected.

THE "two orphans" (NOS. 210 and 211) have found a home in Nebraska.

A kind-hearted woman who has had the experience of raising three orphan children, still has a desire to do something more for the unfortunate children who claim the sympathy and care of some one, and has taken "the baby girl" (No. 206). We are confident that all that any mother could do for a child will be done for this little one, who has known nothing but a nurse's care.

THE following comes from one of our correspondents, who has an earnest desire to know that the orphans are provided with homes: —

"Is it possible that those poor unfortunate waifs have to go begging month after month for a home and shelter in a land of abundance? How long have those 'comfortless' ones been before the church in the *Medical Missionary* and GOOD HEALTH, pleading for food and shelter and loving care and instruction in the way of life? How many of us will hear the terrible words, 'I was a stranger, and ye took me not in?'

"We are expecting a little three-year-old girl from ——. The little six-year-old girl we got from M—— is doing well. She is a remarkably active child, can keep on the jump almost from morning till night. She is also bright and intelligent, and learns fast, and her health has improved since she came here. Her understanding of Bible subjects I think is remarkable, springing in the question at every obscure point, 'What does that mean?' I believe the Lord sends his blessing with these homeless little ones wherever they go."

A KIND family living in Maryland has taken the little boy (No. 216). The father writes: —

"The boy arrived at our home about three weeks ago. We find that he is small for his age, but bright, intelligent, and very quick to learn. We do not anticipate any great trouble with him. I am glad to state that he has been received by all with open hearts and a welcome to our home. It does me good to know that I can have a part in this great cause, one that is so important."

How true it is that when we attempt to make the unfortunate happy or try to brighten some life, the satisfaction of having performed some good deed for others tends to shed rays of light upon our own pathway! It is not the greatness of the deed, but the motive that prompts its performance, that makes the receiver happy. "The most trivial action may be performed to God."

PERSONS making applications for children advertised in this department, are requested to send with their applications the names and addresses of two or more persons as reference. If possible these should be known, either personally or by reputation, to some member of the Board of Trustees.

VISITING DAYS AT THE HASKELL HOME.

PERSONS intending to visit the Haskell Home will please note that the visiting days are Sunday, 4 to 6 P. M., and Wednesday, 2 to 6 P. M. It is necessary to make this announcement, as so large a number of visitors have been calling at the Home that the very interest of the friends, which we have no desire to discourage, has been something of a hindrance to the workers.

J. H. KELLOGG.

CLOTHING FOR THE POOR.

THE call for clothing of all kinds and the numerous offers to supply assistance of this sort, have led us to organize a Clothing Department to receive and properly distribute new or partly worn garments which can be utilized for the relief of the very poor. In connection with this work it is very important that a few points should be kept in mind and carefully observed: —

1. Clothes that are so badly worn that repairs will cost more in money or labor than the garment is worth, will of course be of no service. Garments that are old, though faded, or which may be easily repaired by sewing up seams, or made presentable by a few stitches judiciously taken in some point in which the fabric is nearly worn through, may be utilized to most excellent advantage. But garments so badly worn that they need extensive patching, or clothes which have become much soiled and grimy by long use in some dirty occupation, should find their way to the rag bag instead of the missionary box.

2. Freight must always be prepaid. It costs as much to send 25 pounds or any amount less than 100 pounds as to send the full 100 pounds; consequently it would be well for those who think of sending clothes to be used in this department, to put their contributions together in one shipment, so as to get the benefit of the 100-pound rates. *We are obliged to ask that freight should be prepaid as a means of preventing loss to the work in the payment of freight upon useless packages.*

3. Clothes that have been worn by patients suffering from any contagious disease — such as typhoid fever, erysipelas, consumption, and skin disorders of all sorts, as well as scarlet fever, measles, mumps, diphtheria, and smallpox — should not be sent. Infected clothes may be rendered safe by disinfection, but we cannot trust to the proper disinfection of such garments by those sending them, who, in the majority of cases, are quite inexperienced in such work; neither should those who unpack the clothes be exposed to the risk of contamination while preparing them for disinfection at this end of the line. Such clothes should, as a rule, be destroyed. If they are not destroyed, almost infinite pains are required to render their use perfectly safe.

4. All articles received here are carefully assorted and classified, and are then placed as called for where they will do the most good.

5. Clothing intended for the Chicago Medical Mission should be sent to 40 Custom House Place, Chicago, Ill.

LITERARY NOTICES.

THE FAIR: WHAT DID THE BUILDINGS CONTAIN?—The beauty of the buildings themselves, the landscape effects and water views, have been shown in many forms; but what of the treasures of art, of science, of industry that filled these palaces to overflowing? The study of such a stupendous collection is of itself a liberal education. Thousands of surprising creations and curiosities — the telautograph and other marvelous developments of electricity, the latest mechanical devices, the ethnological treasures from all the most noted collections; the display of the nations in the Liberal Arts building, the statuary from Italy, the gold and silversmith's exhibits from London, the Tiffany gems, the Swiss wood carving, the Bohemian glass from Austria, the French bronzes, the German porcelain, Japanese vases, the great telescope, and countless others; the Horticultural building, with the rare ferns, cacti, fruits and flowers from every land; the United States government display; the model postal car, mint, models from the patent office, the historic relics, the life-size soldiery from the Puritan to the staff officer of to-day; the Fisheries, with its monster aquarium and interesting exhibits; the Palace of Fine Arts, with its seventy-two galleries of statuary and paintings; the foreign buildings, teeming with interesting, strange, and curious collections illustrative of the customs, habits, resources, and art of people of other lands; the State buildings; the Midway, its cosmopolitan life and features; the Mines building, with the greatest mineral display ever brought together, the coal pyramid, the diamond mines of South Africa, and the great Strumm exhibit; the Agricultural building, illustrating the agricultural resources of the nations of the world; the Krupp pavilion; the Transportation building showing the methods of transportation from the earliest period to the present time, the original Grace Darling boat, the sectional steamship, the Nicaragua canal model, the great 999 engine, the mammoth locomotive, "Lord of the Isles;" the Woman's building, with the Queen of Italy's laces, the French salon, the colonial exhibits, the examples of woman's work in all countries,— there is but one work which illustrates and describes all these wonderful exhibits. It has been in course of preparation for nearly two years, and is the most magnificently illustrated work ever issued in America. The title is "THE BOOK OF THE FAIR," 2500 copper-plate engravings, 1000 beautiful pages. Text by Hubert Howe Bancroft. Published in twenty-five parts at $1 each. Applicants for agencies should address as below. Illustrated pamphlet mailed free on application.

THE BANCROFT COMPANY, Publishers, 30 and 31 Auditorium Building, Chicago, Ill.

WE have received a copy of the *Daisy Basket*, the organ of the *Daisy Society*, the childrens' branch of the English Vegetarian Society. It is a wholesome little 16-page monthly magazine filled with good and sensible teaching for the young on the subject of vegetarianism, as well as that of kindness to animals.

"THE STATE AND PROSTITUTION" is the title of a pamphlet by Aaron M. Powell, Editor of *The Philanthropist*, and President of the New York Committee for the Prevention of State Regulation of Vice. The paper discusses the economic and sanitary aspects of prostitution; gives a condensed account of the St. Louis license experiment; of the Cleveland compulsory registration scheme, and of State regulation in European countries, and of the progress of the International movement for the Abolition of State Regulation of Vice, and concludes with an appeal for chastity and an equal standard of morals for men and women. It is a timely, valuable publication. Price, by mail, 15 cents. Address *The Philanthropist*, P.O. Box 2554, New York.

"THE HIGHER CRITICISM," by H. L. Hastings, editor of *The Christian*, is a recent issue of "The Anti-Infidel Library" (No. 37), published by H. L. Hastings, 47 Cornhill, Boston, Mass., at 10 cts., in which the author shows the want of agreement in the conclusions reached by the so-called "Higher Critics." He presents graphically their failure to furnish the proof for their conclusions or the reasons for their opinions to persons of average intelligence though not versed in the "Higher Criticism," and the arrogance with which they assume to themselves superior knowledge; and then he demands that they first determine among themselves just how much of the Bible is to be rejected, and give to the world, not authority, but the evidence for its rejection.

PUBLISHERS' DEPARTMENT.

THE Sanitarium Boarding House at Boulder, Colo., is reported full, and arrangements are being made to enlarge the accommodations of the patients.

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THE Chicago Branch of the Battle Creek Sanitarium has proven a success. A considerable number of patients are constantly under treatment at the Branch, and excellent satisfaction is afforded by the work of the Institution.

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WE are glad to learn by recent reports from the St. Helena, California, Sanitarium that that institution is in a very highly flourishing state. The new cottage built last year, as well as all the other buildings, are filled with patients, and a large number are occupying tents upon the hillside.

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RECENT reports from the Medical Mission at Guadalajara, Mexico, indicate great prosperity in the work there. The natives come in for treatment from a distance of thirty to sixty miles. Arrangements are being made to accommodate a number of patients from the States next winter. There is no better location in the world for a consumptive or a feeble invalid to spend the winter.

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As usual, improvements are in progress at the Sanitarium. The extensive enlargements of the bath-rooms have made them the largest and finest apartments for the purpose of administering the various modes of treatment included in hydrotherapy and electrotherapy to be found in the United States, perhaps the largest to be found in the world. The aim of the managers of this institution is always to make their appliances the most perfect and complete possible. Especial attention has been given to the matter of ventilation.

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INFORMATION FOR CONSUMPTIVES AND THOSE LIVING WITH THEM.— The New York State Board of Health has recently published, in English, Italian, and Arabic, the following information. A circular giving information to consumptives and those living with them contains so much concise and wise instruction we are glad to reproduce it for the benefit of our readers. Information of this character should be diffused as widely as possible.

"Consumption is a disease which can be taken from others and is not simply caused by colds. A cold may make it easier to take the disease. It is usually caused by germs which enter the body with the air breathed. The matter which consumptives cough or spit up contains these germs in great numbers — frequently millions are discharged in a single day. This matter, spit upon the floor, wall, or elsewhere, is apt to dry, become pulverized, and float in the air as dust. The dust contains the germs, and thus they enter the body with the air breathed. The breath of a consumptive does not contain the germs and will not produce the disease. A well person catches the disease from a consumptive only by in some way taking in the matter coughed up by the consumptive.

"Consumption can often be cured if its nature is recognized

early and proper means are taken for its treatment. *In a majority of cases it is not a fatal disease.*

"It is not dangerous for other persons to live with a consumptive, if the matter coughed up by the consumptive is at once destroyed. This matter should not be spit upon the floor, carpet, stove, wall, or street, or anywhere except into a cup kept for that purpose. The cup should contain water, so that the matter may not dry, and should be emptied into the closet at least twice a day and carefully washed with hot water. Great care should be taken by a consumptive that his hands, face, and clothing do not become soiled with the matter coughed up. If they do become soiled, they should be at once washed with hot soap and water. When consumptives are away from home, the matter coughed up may be received on cloths, which should be at once burned on returning home. If handkerchiefs are used (worthless cloths which can be burned are far better), they should be boiled in water by themselves before being washed.

"It is better for a consumptive to sleep alone, and his bedclothing and personal clothing should be boiled and washed separately from the clothing belonging to other people.

"Whenever a person is thought to be suffering from consumption, the name and address should be sent at once to the Health Department, on a postal card, with a statement of this fact. A medical inspector from the Health Department will then call and examine the person to see if he has consumption, providing he has no physician, and, if necessary, will give proper directions to prevent others from catching the disease.

"Frequently a person suffering from consumption may not only do his usual work without giving the disease to others, but may also get well, if the matter coughed up is properly destroyed.

"Rooms that have been occupied by consumptives should be thoroughly cleaned, scrubbed, whitewashed, painted, or papered before they are again occupied. Carpets, rugs, bedding, etc., from rooms which have been occupied by consumptives, should be disinfected. The Health Department should be notified, when the articles will be sent for, disinfected, and returned to the owner free of charge, or, if he so desires, they will be destroyed."

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THE MICHIGAN CENTRAL, "The Niagara Falls Route" for the season of 1894, has placed on sale Summer Tourist's tickets to all the principal Summer resorts of Michigan, Canada, and the New England Coast resorts, including the Thousand Islands, St. Lawrence River, Berkshire Hills, White Mountains, Adirondack Mountains, and Vermont resorts. The magnificent train service of the Michigan Central is unsurpassed in beauty, elegance, completeness, and comfort of its equipment, and its famous through trains carry Wagner palace sleeping and parlor cars, and serve meals in their own dining cars. Write or call upon any Michigan Central agent for a copy of their Summer Tourist book and latest folders.

* *
*

"WHERE FARMING PAYS."—Is it in the Northwest, with wheat at less than 50 cents a bushel, with zero weather, and blizzards in winter and cyclones in summer?—No! Go to Virginia; land is cheap, climate perfect all the year round. Ask any one who knows, and he will tell you that in the tidewater section one acre of land has produced as high as $2000 in one season.

It is worth looking into. Apply to C. H. Bovee, Gen'l Land and Excursion Agent, Coldwater, Mich., for pamphlet, "Facts for Farmers," free. No statements are made that are not corroborated by practical farmers who have grown rich on their Virginia farms.

160 WORLD'S FAIR PHOTOS FOR $1.—These beautiful pictures are now ready for delivery in ten complete parts—16 pictures comprising each part—and the whole set can be secured by the payment of One Dollar, sent to GEO. H. HEAFFORD, General Passenger Agent, Chicago, Milwaukee & St. Paul Railway, Chicago, Ill., and the portfolios of pictures will be sent, free of expense, by mail to subscribers.

Remittances should be made by draft, money order, or registered letter.

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JOHN L. STODDARD.

THE world-famous traveler and lecturer has enjoyed unexampled opportunities for the collection of the finest and best selected photographs of American scenery, the choicest of which are published in a series of sixteen portfolios, with eloquent descriptive sketches from his own pen. In connection with this work, "OUR COUNTRY AND OUR NEIGHBORS," the publishers offer a large new steel plate of NIAGARA FALLS, the finest ever engraved, and which can be procured in no other manner, both for the absurdly low price of $3. Call at the Michigan Central ticket office and see them.

* *
*

WHERE SUMMER BREEZES BLOW.

WOULD you fly if you could
To a glen in the wood,
To a spot in the shade
That nature hath made,
Rich with ferns and wild flowers,
One of nature's fair bowers?

What is life to the soul
If to labor is all?
What a joy to the heart
When for rest we depart
To the woods and the dells.

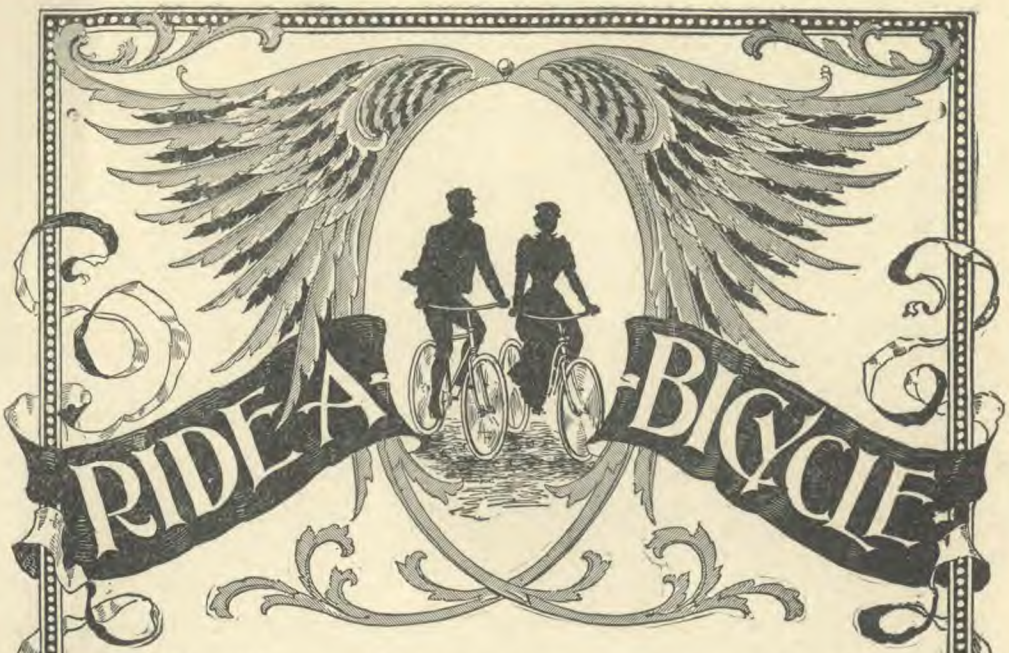
Does your heart cry for rest
In a place that is blest
With no shadow or sorrow
Nor care for the morrow?

If so, send your address for a list of "SUMMER TOURS," published by the Chicago, Milwaukee & St. Paul Railway. Geo. H. Heafford, Gen'l Passenger Agent, Chicago, Ill.

* *
*

WHERE TO LOCATE NEW FACTORIES.

THIS is the title of a 150-page pamphlet recently published by the Passenger Department of the Illinois Central Railroad, and should be read by every mechanic, capitalist, and manufacturer. It describes in detail the manufacturing advantages of the principal cities and towns on the line of the Southern Division of the Illinois Central, and the Louisville, New Orleans, and Texas Railroads, and indicates the character and amount of substantial aid each city or town is willing to contribute. It furnishes conclusive proof that the South possesses advantages for the establishment of every kind of factory working wool, cotton, wood, or clay. For a free copy of this illustrated pamphlet, address C. C. Power, Foreign Representative, 58 Michigan Ave., Chicago, Ill.



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It is a beautiful machine of the highest grade and most perfect construction. Always a source of pride and gratification to its owner and an object of admiration to all wheelmen, it is indisputably the standard bicycle of the world—unequalled, unapproached.

OUR catalogue is sure to interest you. It is handsomely illustrated and contains complete information about our wheels. Free at our agencies, or mailed for two 2-cent stamps.

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ALL WELL KNOWN AND RENOWNED

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FIRE-FIGHTING QUALITIES.

All Carbonic Acid Gas Machines.

Address for further information and circulars as above.

Examine the Bearings.

We mean those *genuine* tool steel, oil tempered, *dust proof* bearings. When we say "dust proof," we are honest, and mean just what we say.

We have heard a good deal about tool steel and crucible steel in bearings that were claimed to be proof against dust. Did you ever examine them?

They are Dust Proof in

some cases. We have spent a great deal of time and money perfecting what we believe to be the most perfect, simplest, lightest, and easiest running bearing yet offered.

In—

THE NEW CLIPPERS,

Nos. 24-25, and Model X, nothing but the *finest* quality of tool steel is used for cones and cups. They are not the kind of "tool steel" that can be made on Automatic machinery, either.

We invite an impartial criticism of *Clipper Bearings*, as compared with any wheel now made. A feature of this is the simple device which prevents balls from escaping when wheel is taken apart.

GRAND RAPIDS CYCLE CO.,

Grand Rapids, Mich.

CHICAGO & GRAND TRUNK R. R.

Time Table, in Effect June 3, 1894.

GOING EAST. Read Down.						STATIONS.	GOING WEST. Read up.					
10 Mail Ex.	8 Erie Lim.	4 L't'd Ex.	6 Atl. Ex.	42 Mixd Tr'n.	2 Pt. H Pass		11 Mail Ex.	1 Day Ex.	3 B'd L't'd	23 B. C. Pass.	7 Erie L't'd	9 P'fic Ex.
a m	a m	p m	p m				p m	p m	pm		p m	p m
8.40	11.25	3.10	8.15	a m	.....	..D.Chicago A..	7.28	4.50	9.10	.....	10.30	8.00
11.10	1.20	5.05	10.30	6.00	.....	...Valparaiso...	5.05	2.45	7.10	.....	8.30	5.45
p m												
12.40	2.35	6.30	12.00	10.05	.....	...South Bend..	3.10	1.20	5.44	.....	7.10	4.10
1.29	3.07	7.12	12.45	12.40	.....	...Cassopolis ..	2.15	12.40	5.13	.....	6.30	3.28
2.21	.....	.....	†1.33	3.42	.....	..Schoolcraft..	1.20	12.02	.....	.....	.....	.....
2.33	.....	7.55	1.48	4.30	a m	...Vicksburg...	1.10	11.53	.....	p m	.....	2.37
3.40	4.30	8.36	2.40	6.20	7.00	..Battle Creek.	12.25	11.15	3.55	9.35	5.18	1.50
4.33	5.11	9.26	3.25	.....	7.47	....Charlotte...	11.14	10.29	3.07	8.40	4.33	12.53
5.10	5.40	9.55	4.00	.....	8.20	....Lansing....	10.40	10.02	2.40	8.00	4.03	12.20
6.30	6.30	10.45	5.03	.....	9.30	.....Durand....	9.35	9.05	1.55	6.50	3.20	11.28
7.30	7.05	11.17	5.40	.....	10.05	.....Flint.....	8.35	8.35	1.28	5.47	2.53	10.35
8.15	7.35	11.50	6.15	.....	10.43	..... Lapeer.....	7.49	8.02	1.00	5.10	2.25	10.01
8.42	.....	a m	6.35	.....	11.06	...Imlay City...	7.28	.....	.....	4.48	.....	.....
9.50	8.45	1.00	7.30	.....	12.05	Pt. H'n Tunnel	6.25	6.50	11.55	3.50	1.20	8.45
	p m	p m					a m	a m	a m	p m	p m	p m
9.25	9.25	.....	.....	.....	.....	.... Detroit.....	.....	6.40	10.40	1.05	.....	8.45
	a m	a m	p m					p m			a m	p m
.....	8.40	8.30	5.25	.....	.....	.... Toronto.....	.....	10.10	.....	.....	7.20	1.00
	p m	p m	a m					a m			p m	
.....	8.05	7.50	7.25	.....	.....	...Montreal	.....	6.00	.....	.....	10.15	.....
	a m	a m	p m					p m			a m	
.....	8 12	8.12	7.15	.....	.....	.....Boston.....	.....	7.30	.....	.....	11.30	.....
	a m	a m	p m					a m	a m		a m	p m
.....	3.05	7.55	4.25	.....	.....	.Susp'n Bridge.	.....	1.20	7.05	.....	8.40	2.25
	a m	a m	p m					a m			a m	p m
.....	4.15	8.30	5.40	.....	.....	.....Buffalo.....	.....	12.00	.....	.....	6.15	1.00
	p m	p m	a m					a m	p m		p m	p m
.....	4.52	9.23	8.06	.....	.....	....New York...	.....	8.20	6.10	.....	5.00	8.00
		a m	a m								p m	p m
.....	.....	8.12	10.20	.....	.....	.....Boston.....	.....	.....	.....	.....	3.00	7.00

Trains No. 1,3,4,6,7,8,9, run daily; Nos. 10, 11, 2, 23, 42, daily except Sunday.

All meals will be served on through trains in Chicago and Grand Trunk dining cars.

Valparaiso Accommodation daily except Sunday.

Way freights leave Nichols eastward 7:15 a. m.; from Battle Creek westward 7:05 a. m.

† Stop only on signal.

A. B. Mc INTYRE,
Asst. Supt., Battle Creek.

A. S. PARKER,
Pass. Agent, Battle Creek.

MICHIGAN CENTRAL

"The Niagara Falls Route."

Corrected June 10, 1894.

EAST.	*Night Express.	†Detroit Accom.	†Mail & Express.	*N. Y. & Bos. Spl.	*Eastern Express.	*N.Shore Limited.	*Atl'ntic Express.
STATIONS.							
Chicago.....	pm 9.35		am 6.50	am 10.30	pm 3.30	am 9.05	pm 11.30
Michigan City.	11.35		8.50	pm 12.20	5.20	10.46	am 1.19
Niles.....	am 12.45		10.05	1.20	6.25	11.43	2.45
Kalamazoo	2.15	am 7.20	11.47	2.40	7.40	pm 12.55	4.35
Battle Creek...	3.00	8.10	pm 12.50	3.13	8.18	1.28	5.22
Jackson.....	4.30	10.00	2.55	4.23	9.35	2.40	6.50
Ann Arbor.....	5.40	11.05	4.05	5.10	10.25	3.30	7.47
Detroit.....	7.10	pm 12.20	5.30	6.10	11.25	4.30	9.20
Buffalo.....				am 12.40	am 6.45	11.10	pm 5.20
Rochester.....				3.30	9.55	am 1.57	9.00
Syracuse.....				5.35	pm 12.15	3.55	10.45
New York.....				pm 1.45	8.45	11.00	am 7.00
Boston.....				4.15	11.45		10.50

WEST.	*Night Express.	*N.Y.Bos. &Chi.Sp.	†Mail & Express.	*N.Shore Limited.	*Weste'n Express.	† Kalam. Accom.	*Pacific Express.
STATIONS.							
Boston.....		am 10.30		pm 2.00			pm 7.15
New York.....		pm 1.00		4.30	pm 6.00		9.15
Syracuse.....		8.00		11.25	am 2.05		am 7.20
Rochester.....		9.50		am 1.17	4.00		9.55
Buffalo.....		11.20		2.20	5.30		pm 3.30
Detroit.....	pm 8.45	am 6.05	am 7.20	8.30	pm 1.00	pm 4.35	11.10
Ann Arbor.....	10.25	7.05	8.43	9.25	2.00	5.57	am 12.15
Jackson.....	11.40	8.10	10.43	10.32	3.00	7.40	1.25
Battle Creek...	am 1.17	9.20	pm 12.15	11.50	4.13	9.13	2.55
Kalamazoo	2.10	9.58	1.00	pm 12.30	4.52	10.00	3.36
Niles.....	4.00	11.13	3.00	1 45	6.12		5.00
Michigan City.	5.09	pm 12.10	4.25	2.45	7.10		6.00
Chicago.....	7.10	2.00	6.35	4.30	9.00		7.50

*Daily. †Daily except Sunday.

Kalamazoo accommodation train goes west at 8.05 a.m. daily except Sunday.
Jackson " " east at 7.27 p. m. " "

Trains on Battle Creek Division depart at 8.10 a. m. and 4.20 p. m., and arrive at 12.40 p. m. and 7.15 p. m. daily except Sunday.

O. W. RUGGLES,
General Pass. & Ticket Agent, Chicago.

GEO. J. SADLER,
Ticket Agent, Battle Creek.

NON-ALCOHOLIC KUMYSS

AFTER careful and long-continued experiments, we have devised a method of preparing kumyss which is not only free from alcohol, but also possesses other advantages of a superior character. Ordinary kumyss contains a considerable amount of alcohol, due to the fermentation of cane sugar, which is added for the purpose of producing carbonic acid gas. The amount of alcohol depends, of course, upon the amount of sugar added and the age of the kumyss. The sugar is made to ferment by the addition of yeast. Kumyss made in this way contains yeast alcohol, and, if the alcoholic fermentation is not complete, a variable quantity of cane sugar. In addition, ordinary kumyss contains a variety of toxic substances, resulting from the development of the miscellaneous microbes which are usually found in milk.

The improved form of kumyss which we offer is made from sterilized milk, and by processes which render it absolutely uniform in quality. The method of manufacture is such that its constituents are definite and constant. It is more palatable than ordinary kumyss, in consequence of the absence of foreign microbes, and is particularly suited to cases in which milk in its ordinary form disagrees with the patient, and in which so-called "biliousness" is a troublesome symptom. Cases of hypopepsia are rapidly benefited by it. It is also of great service in the treatment of gastric neurasthenia, or nervous dyspepsia.

It is extensively used in some of the largest medical institutions in the country, and has received the highest commendation from those who have investigated its merits. This kumyss is put up in pint and quart bottles, and will be shipped to any address at the following price: —

Pint Bottles, per doz., = = $2.00.

Sanitarium Health Food Co.,

BATTLE CREEK, MICH.

Childhood.

A MAGAZINE . . . .
FOR PARENTS,

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MINOT J. SAVAGE,
ELIZABETH STUART PHELPS,
MARIA LOUISE POOL,
LOUISE CHANDLER MOULTON,
HELEN CAMPBELL.

BESIDES its has five regular departments, unique and unrivaled in their different fields: "THOUGHTS AND SUGGESTIONS," by Florence Hull. "UNTIL THE DOCTOR COMES," a page of free advice by the Editor, that is alone worth the price of the magazine. "THE TWILIGHT HOUR," the serial story of the child's inner life, by Adelaide Grace Lytton. "MOTHER'S QUERIES," by Auretta Roys Aldrich, and "SAYINGS AND DOINGS," the Harper's Drawer of CHILDHOOD, by Alan Chadwick.

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CLEANSING AND ANTISEPTIC; WILL REMOVE TARTAR AND YELLOWNESS; WILL NOT INJURE THE TEETH.

Price, Postpaid, 20 Cents.

SANITARY SUPPLY CO., BATTLE CREEK, MICH.

The Open Window

A monthly magazine published by **THE SHUT-IN SOCIETY,** organized to be the INVALIDS' FRIEND, COMFORT, AND MEANS OF COMMUNICATION.

TERMS: { Associates and Subscribers, 1 year, $1.00
Invalid Members, 1 year, - - .50

Those interested personally for their friends can obtain information or sample copies from

Mrs. H. K. MUNROE,
Secretary and Treasurer,
MIDDLETOWN, - - CONN.

HEALTH FOODS

IN the effort to meet the necessities of a large Sanitarium, with its great variety of patients, we have produced a number of food preparations adapted to different diseased conditions, the merits of which are such as to secure for them a very large and increasing sale, not only to persons belonging to the invalid class, but to those who wish by "good living" to avoid disease. Unsuccessful attempts have been made to imitate some of these foods under various names. None are genuine unless bearing our stamp or made under our authority. The following are our leading preparations:—

	Cts. per lb.		Cts. per lb.		Cts. per lb.
Oatmeal Biscuit	12	White Crackers	10	Wheat Granola (bulk 10)	12
Medium Oatmeal Crackers	10	Whole-Wheat Wafers	10	Avenola (bulk 10)	12
Plain Oatmeal Crackers	10	Gluten Wafers	30	Granola (bulk 10)	12
No. 1 Graham Crackers	10	Rye Wafers	12	Gluten Food No. 1	50
No. 2 Graham Crackers	10	Fruit Crackers	20	Gluten Food No. 2	20
Plain Graham Crackers, Dyspeptic	10	Carbon Crackers	15	Infant's Food	56

SAMPLE PACKAGES CONTAINING SPECIMENS OF EACH OF OUR FOODS SENT POSTPAID FOR 50 CENTS.
SELECTED SAMPLES, 25 CENTS.

All grain preparations can be supplied in large or small lots, as we keep a fresh supply constantly on hand of goods which are largely made expressly for us, of a superior quality of grain. Address—

SANITARIUM HEALTH FOOD COMPANY
BATTLE CREEK MICH.

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New Valve for Victor Pneumatic Tire.
Victoria Tilting Saddle for Ladies.
Lighter and Stronger Hub, and Direct-tangent Spokes.

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OVERMAN WHEEL CO.

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MEDICAL AND SURGICAL SANITARIUM,

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SPECIAL ADVANTAGES:

An elevated and picturesque site. Remarkably salubrious surroundings.
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