

# SCIENCE AND TUBERCULOSIS

Methods of Fighting This Most Insidious of All Diseases—  
Best Plan Is to Keep Body in Proper Condition.

### The "Cold Air Cure."

Cold air purifies the blood, energizes the heart, puts new vim into the muscles, helps the stomach, wakes up the liver, lifts the whole being to a higher plane of life.

The most successful consumption resort in the world is Davos, a winter resort in the Swiss Alps, near the Engadine, where the snow is six feet deep and the temperature close to zero all winter. Every winter hundreds of tubercular patients from all parts of the world resort to Davos to take the "cold air cure."

Cold air cures (there is no doubt about it), when accompanied by wise and skillful management, and careful regulation of diet. In the summer season this great healing force is available only in a small measure by means of cold baths, ice rubs, and fans; but in the winter season, the keen frosty air is everywhere, ready to be put to work as the great uplifting power it is when rightly applied.

The winter season alone provides continuous tonic conditions. The dense air, containing from one-eighth to one-fourth more oxygen than mid-summer, stimulates all the vital processes to a higher degree of activity. Here is a healing force which is in operation day and night, and steadily lifts the patient up to a higher level until the ebbing tide of life turns backward, and renovating forces of the body resume their activities with all the old-time vigor.

### The Price of Indoor Life.

Within the past twenty years there has been a steady development of confidence in the out-of-door method of treating pulmonary tuberculosis. The wonderful success that has attended the outdoor treatment in all countries, irrespective of altitude or special climatic advantages, has demonstrated the immense value of the out-of-door life as a curative means. This is not surprising, since man is naturally an out-of-door animal. The indoor life which most civilized human beings live is wholly artificial. We pay an enormous price for the luxury of living in houses. Not only pulmonary tuberculosis, but a large number of other chronic maladies are the natural outgrowth of the lowered vital resistance which results from the conditions imposed by modern civilized life.

We have become too much civilized. A mild return to savagery is the one thing needful at the present time. In cold weather we can not live out of doors, but we can take care to supply our living rooms, and especially our bedrooms with an abundant supply of pure cold air. This is a very excellent remedy for morning headaches, which usually mean air-poisoning.

### Appetite Juice.

The taking of food into the mouth is a signal to all the digestive organs to prepare for work. Even the sight and odor of food may cause an outflow of saliva, and at the same time the gastric juice pours into the stomach.

Pawlow, of St. Petersburg, in experiments upon a dog, observed that when food was introduced into the animal's stomach through an opening made for the purpose it was not acted upon; the digestive juice was not poured out, and the stomach apparently remained inert for nearly half an hour. On the other hand, when the animal was allowed to see and smell the food, the saliva and the gastric juice poured forth abundantly, even though the animal did not actually taste a morsel. It is important that the food should be retained in the mouth for a sufficient length of time to make the proper impression upon the nerves of taste, so that the entire digestive apparatus shall be thoroughly prepared to carry the food substances through the successive steps of the digestive process.

The thorough chewing of the food produces an abundance of what Pawlow calls "Appetite Juice," which is the best and most important juice formed by the stomach. Hence food must be well relished, and eaten with careful attention to very thorough mastication.

### Vital Activity in Cold Weather.

The vital fires burn brighter in cold weather. The whole tide of life moves with greater activity. The process of digestion is quickened because the process of oxidation is increased. The liver requires oxygen for making bile and performing all its varied functions, and the oxygen we breathe in cold air, improves the function of the liver, so it can do one-seventh more work than before.

The muscles, also, depend for their activity upon oxygen. In an excess of carbonic acid gas the muscles are asphyxiated, and so one feels depressed in warm weather.

A person does not get out of breath so easily in cold air as in warm. The woodchopper can swing his axe with more energy on a cold day. Cold air aids in the elimination of the poisonous matters which are all the time forming within the body.

When oxygen is not plentiful enough to make the vital fires burn sufficiently to consume the fuel and waste of the body, then much of the waste material is left behind in the form of imperfectly burned substances, which may be called cinders of the body.

### Burning Up the Body Cinders.

All food must be burned within the body to be of any value. If too much food is shoveled in, the body furnace

is clogged. If too little draft is supplied the fuel is not entirely consumed. This leaves "cinders" which are the cause of many chronic diseases, and of premature old age.

The fuel supply may be regulated in the dining room. The draft is dependent on the kind and amount of air breathed. Cold, crisp, fresh air furnishes perfect draft. The blood takes from this kind of air, when it is breathed in, just the element needed to burn the food.

Six breaths of out-door air contain as much of this element—oxygen—as seven breaths of overheated, indoor air. As man breathes about eighteen times per minute this means a loss of four thousand breaths a day by living in a hot, close indoor atmosphere. The amount taken in depends on the habits of life. A deep breath must be earned. A few moments vigorous outdoor exercise will do it. The nostrils dilate, the chest heaves, the heart quickens, the lungs expand, and the fresh air is pumped into the body at a rapid rate. The draft is open. The cinders are burning up. The whole system is being cleared of rubbish.

Don't be afraid of cold air. There's life and health out of doors.

### Alcohol vs. Strength.

The laborer, the traveler, and the soldier use alcohol under the delusion that it produces strength. When fatigued, the laborer takes a glass of grog, and feels better. He imagines himself stronger. His increased strength, however, is wholly a matter of imagination.

The use of alcohol makes a man feel stronger—makes him believe that he can do more work, endure more fatigue and hardship, and withstand a greater degree of cold than he could without it; but when an actual trial is made, it soon becomes apparent that the ability is lacking. Numerous experiments have shown that alcohol decreases muscular strength. Says Dr. Brunton, "The smallest quantity takes somewhat from the strength of the muscles." Says Dr. Edmunds, of London, "A stimulant is that which gets strength out of a man."

Some years ago a series of experiments were made for the purpose of determining the influence of alcohol upon the muscular strength. The combined strength of all the different groups of muscles in the body was found, in the case of a healthy young man, to be 4,881 pounds. The young man was then given two ounces of brandy, and the test was repeated. He felt confident that his strength was increased. In fact, it was found to be only 3,385 pounds, a loss of more than one-third. A notable diminution in strength was still present ten hours after the administration of the brandy.

### Real Healing Agents.

There are many fictitious remedies. Some make a man feel better when he is really getting worse. The most valuable measures which can be employed in dealing with the sick may be said to be baths, exercise and diet. The chronic invalid can be made well only by being reconstructed. The sick man must be transformed into a healthy man by a process of gradual change. He has been months or years in tearing down his constitution and substituting an inferior grade of material. Now this process must be reversed, and little by little, the old tissues must be torn down and new tissues built in their place.

Warm baths help throw off stored up poisons, and cold baths hasten the destruction of waste tissues, increase the activity of the heart and of all the organs, encourage the formation of the digestive fluids, and increase the appetite for food.

By means of exercise the movement of the blood is quickened and the old diseased tissues are broken down and carried out of the body. Exercise always diminishes weight. By exercise a normal appetite is earned and deep breathing encouraged.

Pure simple food is the proper material with which to construct a new and healthy body. Man is built of what he eats. The house is no better than the material. Thus baths, exercise, and a natural dietary constitute a curative trio, each helping the other.

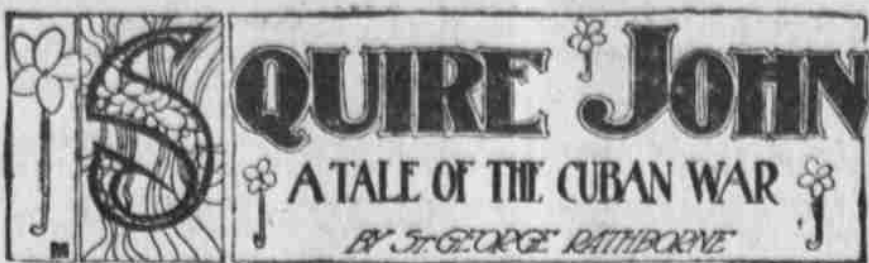
### WHOLESome RECIPES.

**Tomato Sauce**—One quart strained tomatoes, one tablespoonful nut butter, one grated onion. Mix well and boil five minutes. Thicken with cornstarch to the consistency of thick cream. Salt to taste.

**Cream of Peanut Soup**—One cupful ground peanuts; one-half teaspoonful celery salt; one small onion cut fine; one pint cooked tomatoes. Cook slowly and long. When done rub through a colander and add three pints of rich milk or part milk and part cream. Let come to a boil and serve at once.

**Macaroni with Kornlet**—Boil tender one and one-half cups of macaroni, broken into inch lengths, in salted water. Rub one can of hulled sweet corn through a colander or use the prepared Kornlet, and add to it one pint of cream or nut cream. Heat to boiling and thicken with one tablespoonful of flour. Mix with the cooked macaroni, add one and one-fourth teaspoonfuls of salt; turn into a pudding dish and brown in a hot oven.

**Date Dainties**—Wash and steam for about ten minutes some choice dates. Split one side, remove the seed, putting in its place one-fourth of a walnut nut; press together and roll in powdered sugar.



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### CHAPTER XV.—Continued.

Smithers believes there is no further necessity for torturing the poor devil whom the fortunes of war have thrown into his power, and is willing to compromise the matter. So he suddenly pushes the half-strangled guard back into the compartment, and finding a means of opening the door, passes inside just as the carriage ceases to move.

Ah Sin has not been backward about managing his share of the business, and he utilizes the piece of iron in his hand to such good purpose that the car makes no effort to return toward the bottom of the incline.

As for Jack, he has his work cut out also. When the vehicle of transportation ceases to move, he reaches the ground alongside, and hastens toward the compartment in which the party may be found in whom he is so deeply interested.

Now he reaches the door. He is on the other side from that selected by Smithers, so that he sees nothing of that worthy gentleman's little engagement with the trait guard. "Why do we stop, guard?" asks a voice, and Jack readily recognizes it as belonging to the very being who fills his thoughts.

She is there within arm's length of him at the moment—what ecstasy the fact brings to him—his Highland bride, the girl who really bears his name; and yet a cruel fate compels him to dissemble.

"There has been an accident—a coupling proved false, and the train has gone on, leaving our carriage behind," is what he says.

He hears feminine exclamations of alarm, and the gruffer tones of a man's voice. Then out comes the white head of the painter.

"What is all this, guard? You say we are left behind in the wilds. Cospita! this is, indeed, a nice kettle of fish."

Senor Roblado is evidently in a towering rage at being subjected to such delay. He opens the door and springs out into the night.

Immediately he makes a discovery. He looks at the disguised Squire John as though something very singular has flashed into his mind.

"Caramba, you are not the guard we had at the last station!" ejaculates Roblado.

"I know it," replies Jack, simply. "Then who are you?" demands this fiery don, as if suspecting treachery.

"A passenger by the train, like yourself, senior, and one who is as much interested in looking after our safety as you may be."

Roblado cools down a little. "What would you advise, senior?" asks the don, eagerly.

"A danger signal both up and down the line, that we may warn them, no matter from what direction they come."

"You mean lanterns?" "If they can be had; but otherwise fires will do just as well."

"A splendid thought. I congratulate you on your idea, senior. Let us waste no time in accomplishing it. Ah, who is this?" as Ah Sin comes creeping in.

Long ere now Howard Spencer has learned of his fallacy with regard to the death of Jack Travers. Senor Roblado has regaled him with a full and exceedingly vivid account of the singular events that followed so fast upon his accident in the Canongate. Hence he knows Jack is alive, and that through the most peculiar freak of fortune in the world he was permitted to wed sweet Jessie Cameron, just as the outrageous will and testament of his Quixotic relative required. This being the case, it may be safely assumed that Spencer nurses an additional grievance against the man he has wronged, and that when the very first opportunity springs up he will avail himself of it in the hope of winning "Squire John's" widow.

As to that, Jack hopes to have a voice in the matter himself.

The three are apparently discussing some knotty question connected with the peculiar situation when Jack comes up.

They turn to him as though resolved to have his idea on the subject, and Jack experiences an itching of the fingers when he finds himself near the man who envies him the possession of Jessie Cameron, for something tells him that sooner or later they will have to fight it out between them.

Spencer eyes him curiously, but gives no evidence of suspicion.

"Senior, we were just debating here whether this thing that has happened to us can be an accident or some deep design on the part of those who secretly plan to destroy the government of Spain on this island. I had not thought of that until your friend mentioned it."

It is, of course, Senor Roblado who says this. "I myself have wondered whether the rebels can have any special desire to make way with some of us. It looks suspicious, I am bound to confess," remarks Jack, coolly.

Roblado has a guilty conscience—he knows full well there are good reasons why the patriot followers of Gomez and Maceo should hate him like poison—and Jack, who has purposely sent the shaft, sees the start and sudden pallor that mark its reception.

Undoubtedly the worthy senior has a pretty good notion that if this has happened by design instead of ac-

cident, he is the party at whom the blow is aimed.

"Gentlemen, I trust you are all armed, so that should we be attacked the ladies may be defended," he says, hastily, at which there is a general showing of firearms that might appear ridiculous in many countries, but which is certainly not out of place in poor, distracted Cuba.

Senor Roblado shows some relief when assured that the revolver which he so quickly brings to light is at once matched by every one of the others present.

"Cospita! a brave collection indeed, seniors. With valiant men behind them, I am sure we need have little fear of the result, unless—"

The white haired artist and Spanish diplomat never finishes that sentence. While he is in the midst of it, there suddenly salutes their startled ears a heavy, rumbling sound. The very earth seems to quiver under their feet.

"Thunder!" exclaims Senor Roblado on the spur of the moment.

"Bah! look at the sky," echoes Jack.

Not a star is to be seen; the silvery clouds peep down upon them with a brightness that has to be witnessed



in a tropical clime in order to be appreciated.

"You are right—it cannot be thunder, since there are no signs of a storm. What, then?" says the senior, in no little excitement.

"Hark!" As Smithers utters the one word, they all strain their hearing. A gentle southern zephyr chances to be blowing, and this brings to their ears faint, far-away sounds that, while confused at first, resolve themselves into shouts and rifle shots, together with all the other various noises that signalize a battle royal.

Senor Roblado no longer gropes in uncertainty after the truth. It has flashed upon his mind as the meteor leaps through space. "Por Dios! listen to that seniors. Yonder men meet in deadly strife. And that fearful explosion—I tell you it was dynamite. They have blown up the train, those fiends incarnate who fight against Spain!" he cries in a husky voice, that trembles in spite of the man's positive nerve.

"Under those conditions it seems to me our accident, then, has turned out a most remarkable piece of good luck for us," remarks Jack, with a coolness that is refreshing. "Quiet save? At least we are alive, and that is something to be thankful for. But, gentlemen, I have reason to believe they seek me over yonder, and upon learning the truth will come this way in force."

"That will be bad," declares Smithers, who has hard work to hide the grin that causes his facial muscles to twitch. "Very bad indeed. But, seniors, if they should come, that is no reason we must give in like weaklings. I myself will set you an example. They shall only enter yonder carriage, where the ladies are, over my body."

### Champion Mean Man.

Senator Sereno E. Payne of Auburn, while at the Republican headquarters last week, says the New York Globe, related an instance told to him a few weeks ago that for meanness will be hard to beat.

"A certain wealthy broker of Boston noted for his close-fistedness sought in a fit of generosity to recognize a small service rendered him by one of his fellow-brokers. 'Look here,' said he, 'I'll stand you a 10-cent cigar if we meet later in the day.' Just before the closing of the market the two met on the exchange.

"Oh," said the first broker, 'I haven't had time to buy that cigar, but I'll tell you what I'll do, old man. I've got a 25-cent cigar in my pocket, and if you'll give me 15 cents it's yours.' "It's not recorded what the other fellow said in reply," added the senator.

### A Difference.

Judge John J. DeHaven of San Francisco wished in a recent address to point out the importance of trifles.

"Every trifle," he said, "has some weight, and to form an accurate judgment no trifle may be overlooked. It is amazing how great a difference an apparent trifle may make."

"Once, when I was a youth, I attended a court where the judge was a little deaf. A witness stated his occupation, and the judge, bending forward with his hand to his ear, said: "You are, you say, an organ grinder?"

The judge was only a trifle wrong, yet the witness corrected him somewhat haughtily. "An organ builder," he said.

### A WOMAN'S MISERY.



"I was troubled for about nine years, and what I suffered no one will ever know. I used about every known remedy that is said to be good for kidney complaint, but without deriving permanent relief. Often when alone in the house the backache has been so bad that it brought tears to my eyes. The pain at times was so intense that I was compelled to give up my household duties and lie down. There were headaches, dizziness and blood rushing to my head to cause bleeding at the nose. The first box of Doan's Kidney Pills benefited me so much that I continued the treatment. The stinging pain in the small of my back, the rushes of blood to the head and other symptoms disappeared."

Doan's Kidney Pills for sale by all dealers. 50 cents per box. Foster-Milburn Co., Buffalo, N. Y.

### Punctured Bubble.

The phrase "punctured bubble" is applied to any person, enterprise or thing that in the beginning looks brilliant and promising, but which, after a short existence, is punctured by criticism and then disappears as quickly as a broken bubble.

### Pasteboard Resists Bullets.

At some firing experiments by the Swedish government the bullets failed to penetrate targets made of pasteboard three inches in thickness, yet they easily pass through planks five inches thick.

### Book Brings Big Price.

The sum of \$20,000 was paid at a London auction for a "Codex Psalm arum" of the year 1459, of which only twenty copies were originally printed.

### Life of Telegraph Wires.

Telegraph wires will last for forty years near the seashore. In the manufacturing districts the same wires last only ten years and even less.

A New York contemporary wants to know if Julius Caesar is dead. We have not noticed his death notice anywhere.

### SPREADING THE NEWS BROADCAST.

That Dodd's Kidney Pills cured his Diabetes. After long suffering Mr. G. Cleghorn found a permanent relief in the Great American Kidney Remedy.

Port Huron, Mich., Jan. 30th.—(Special)—Tortured with Diabetes and Bladder Disease from which he could apparently get no relief, Mr. G. Cleghorn, a bricklayer, living at 119 Butler St., this city, has found a complete and permanent cure in Dodd's Kidney Pills and in his gratitude he is spreading the news broadcast.

"Dodd's Kidney Pills made a man of me," Mr. Cleghorn says. "I was a sufferer from Diabetes and Bladder Disease. I was so bad I could do no work and the pain was something terrible. I could not get anything to help me till I tried Dodd's Kidney Pills. They helped me right from the first and now I am completely cured. I have recommended Dodd's Kidney Pills to all my friends and they have found them all that is claimed for them."

Dodd's Kidney Pills cure all Kidney ills from Backache to Bright's Disease. They never fail to cure Rheumatism.

One month in the school of affliction will teach thee more than the great precepts of Aristotle in seven years; for thou canst never judge rightly of human affairs, unless thou has first felt the blows, and found out the deceits of fortune.—Fuller.

There is more Catarrh in this section of the country than all other diseases put together, and until the last few years was supposed to be incurable. For a great many years doctors pronounced it a local disease and prescribed local remedies, and by constantly failing to cure with local treatment, pronounced it incurable. Science has proven Catarrh to be a constitutional disease and therefore requires constitutional treatment. Hall's Catarrh Cure, manufactured by F. J. Cheney & Co., Toledo, Ohio, is the only medicinal cure on the market. It is taken internally in doses from 10 to 100 drops in a teaspoonful. It acts directly on the blood and mucous surface of the system. It may offer one hundred dollars for any case it fails to cure. Send for circulars and testimonials.

Address: F. J. CHENEY & CO., Toledo, Ohio. Sold by Druggists. Take Hall's Family Pills for constipation.

You do not cleanse yourself by snuffing every one else.

Among those who have received the highest award—the Grand Prize—at St. Louis World's Fair, was the A. J. Tower Co., the makers of the FIRST BRAND BLACKBERRY. Many of our readers who visit the Fair will recall their fine exhibit in which waterproof garments were shown adapted to so many uses that almost every department of the world's work was suggested. The Grand Prize was a deserved tribute to one of the oldest manufacturing concerns in the country.

The man who puts his heart into his work will always get ahead in it.

The Best Results in Starching can be obtained only by using Defiance Starch, besides getting 4 ounces more for same money—no cooking required.

It takes more than the Sunday suit to make the solid saint.

A GUARANTEED CURE FOR PILES. Itching, Bleeding or Profuse Piles. Your druggist will refund money if PAIN OINTMENT fails to cure you in 4 to 14 days. Sec.

You soon lose the religion you try to keep to yourself.

Pine's Cure cannot be too highly spoken of as a cough cure.—J. W. O'HARA, 323 Third Ave., N. Minneapolis, Minn., Jan. 6, 1902.

"Time to burn" keeps the devil's furnace going.