



# SCIENCE

### BURNING FEET.

Many persons suffer from a peculiar sensitiveness of the feet shown by distressing burning, smarting or itching, or sometimes by increased perspiration or throbbing, especially at night after an unusual amount of standing or walking. Toward evening the sufferer begins to be disagreeably or even painfully conscious of his feet, which feel hot and tired, and seem to have grown too large for the shoes. Inspection of the bare feet may reveal nothing particularly noticeable, beyond perhaps a slight redness of the skin; or it may show a more or less general eruption, either moist or dry and scaly, resembling salt-rheum. But this eruption is another affection altogether from the one now under consideration; it is true eczema, and the distress caused by it is continuous and only moderately increased at night. In the cases of which we are speaking the sufferer is usually fairly comfortable in the morning, and it is only as the day wears on that his torment be-

### Cause of the Trouble.

comes unendurable. The cause of the trouble may be external or internal; it may be found in a lack of proper attention to the feet, or in the wearing of unsuitable shoes, or it may be the result of a constitutional trouble—the so-called uric acid diathesis. When the trouble is constitutional, appropriate dietetic and hygienic measures must be carefully followed; but usually relief is to be sought in local measures. To some persons with sensitive skin dyed stockings are very irritating, others are tormented by woolen socks. In such cases the remedy is obvious. The shoes should be roomy and not made of patent or enameled leather, and rubbers should be worn as little as possible and always removed in the house, even if one stays there but five minutes.

### How to Get Relief.

In the evening the sufferer should immerse his feet in cold water for a few minutes, and then after drying with a soft towel without friction, put on clean stockings and a different pair of shoes from those worn during the day. This will always give more or less relief, and usually will bring comfort for the rest of the evening. Changing the shoes is better than putting on slippers, and has the advantage of not exposing one to catch cold when the floor is drafty. There will be little danger of that, however, after the daily cold foot-bath has become an established habit, for this will not only relieve the local discomfort, but will also tend to strengthen the entire system and render it more resistant to noxious influences of all kinds.

### NEW LIFE-SAVING CRAFT.

The queer-looking craft shown is an ingenious idea, to say the least, as it combines a number of original features in the commendable purpose of life-saving at sea. The complete craft, with its mast, sail and life lines, is contained on shipboard within the two metallic caps seen at the bow and stern, and as the inventor makes ar-



INFLATED LIFEBOAT WITH TELESCOPING MAST.

range for the storage of these life-savers in pockets along the sides of the ship they will not take up as much room as would seem likely at a first glance. In storing the apparatus the mast is telescoped into its socket and the hollow platforms at the sides shut up within each other, making the whole outfit of a size to be readily contained in the pockets formed around the ship for the purpose. As soon as the ship is wrecked or becomes unseaworthy the opening of a valve forces a powerful gas into the body of the craft, inflating it rapidly and at the same time, extending it outward from the side of the ship, where the life lines may be grasped by the passengers. Provision is made for carrying food and drink to sustain life for some time, and for the re-inflation of the gas chamber if the gas deteriorates in expansive power.

### THE ECLIPSE CYCLONE.

The remarkable discovery that a total eclipse of the sun develops a cold-air cyclone as the shadow sweeps across the earth has been made by Mr. H. C. Clayton through a study of the meteorological phenomena observed during the eclipse of May, 1900. During the eclipse the winds were practically reversed in direction, as the shadow moved from one side of the continent to the other, and there was an outflow of air from the shadow to a distance of 1,500 miles. As the shadow progressed about 2,000 miles an hour, "the eclipse cyclone, to keep pace with it, must have continuously formed within the shadow and must have dissipated to the rear almost instantly." Mr. Clayton believes that this

## ON HONOR'S FIELD.

### DUELING IN THIS COUNTRY AND GREAT BRITAIN

Came Down to Quite Recent Times—Last Duel in England Fought in 1845. In the United States in 1883—Flight from Balloons.

It is the fashion today both in America and England to ridicule that peculiar code of honor which finds its expression in dueling; but perhaps we would be a little more saving in our ridicule and censure if we remembered that until quite late in the 19th century both Americans and Englishmen were enthusiastic patrons of the field of honor. When the last century was young it was not an uncommon thing for 20 duels to take place in a day in the British Islands. During the reign of George III there were 172 duels in England alone, and there were several trials of peers for murder by the House of Lords growing out of them. There are men still alive who can recall the sensation that was made by the Duke of Wellington, then premier of Great Britain, in fighting a duel with the Earl of Winchelsea. That was in 1829. The last duel in England between British subjects was fought at Southsea in 1845, when Lieut. Hawkey killed Lieut. Seton, of the Eleventh Hussars. Until 60 years ago dueling flourished in Ireland as much as it ever did in France. All the noted Irishmen of the early part of the century were duelists. Even the great O'Connell, religious as he was and averse to shedding of blood, figured on the field of honor. As for our own American record, dueling was quite a conventional thing with us down to the time of the civil war, and as late as 1883 it may be recalled that Mr. Knox and Mr. Sheehan, the last-named gentleman being a direct descendant of the famous duelist, Richard Brinsley Sheridan, met at Far Rockaway, near New York, and exchanged shots, Knox being wounded on the second fire. In the same year R. R. Beirne and W. C. Elam, two Richmond editors, met on the field of honor at Waynesboro, after a most exciting race to escape the pursuing sheriffs, and Mr. Elam was wounded in the hip. These, we believe, were the last two duels conducted according to the code in this country. Our ante-bellum record may well restrain our contemptuous comments on dueling in Europe. There are many places in this country which have tragic memories as dueling grounds. On the fighting grounds of Bladensburg, named after Gov. Bladen of Maryland, many distinguished Americans have met. The first duel was fought there in 1808 when two congressmen—J. W. Campbell from Kentucky and H. B. Gardiner from New York, the latter being severely wounded. In 1814 English Edward Hopkins of the navy, was killed there by a brother officer, whose name is still in doubt. There Armstrong Thomson Mason, one of the most brilliant and popular Virginians of the period, was killed by his cousin John Mason McCarty, on a February morning in 1819. They fought with muskets only 10 paces apart. The great name of Stephen Deatur, of Maryland, naval hero of 1812, is also on the list of Bladensburg's victims. He was killed there in 1820 in a duel with James Barron, a brother officer. Later came the Graves (Ky.) and Cliley (Me.) duel, in which Cliley was killed. The last fatal encounter on that celebrated fighting ground was fought as late as 1846, when Daniel Johnson, a physician and Thomas F. Jones, a lawyer, both of North Carolina, met there. Johnson was instantly killed by his adversary's first fire. A notable duel between Virginians took place near Weldon, N. C., about 1840, in which Daniel Dugger, a Whig, was killed by George C. Dromgoole, Democratic member of Congress for the Petersburg district. In France there are about 4,000 duels yearly and in Germany, in the army and in colleges, duels are daily occurrences. There is a growing tendency to discredit the practice, however, and it is probable that before the present century has run half its course dueling will be as obsolete in Germany and France as in America. Probably the most sensational duel ever fought was in France. In 1808 M. de Grandpre and M. De Bisque, who had quarreled about an opera dancer, agreed to fight a duel from balloons in a field near the Tuilleries, armed with blunderbusses. The balloons kept about 80 yards apart and when they were 800 feet high, on a signal being given, M. De Bisque fired. He missed aim, whereupon Grandpre fired into Bisque's balloon and he and his seconds were dashed to pieces on a housetop.—Utica Globe.

### FRUIT AS A FOOD.

Seasonable Changes in Food Supply Necessary for Good Health.

Taken in the morning, fruit is as helpful to digestion as it is refreshing. The newly awakened function finds in it an object of such light labor as will exercise without seriously taxing its energies, and tissues of the stomach acquire at little cost a gain of nourishment which will sustain those energies in later and most serious operations. It is an excellent plan with this object in view, to add a little bread to the fruit eaten. While admitting its possession of these valuable qualities, however, and while also agreeing with those who maintain that in summer—when the body is, at all events, in many cases, less actively employed than usually—meat may be less, and fruit and vegetables more freely used as a food, we are not prepared to allow that even then exclusively vegetarian regimen is that most generally advisable. Meat provides us with a means of obtaining albuminoid material, which is indispensable, in its most easily assimilable form. It affords us in this material not only an important constituent of tissue growth, but a potent excitant of the whole process of nutrition. It has, therefore, a real definite and great value in the ordinary diet of a man, and the wholesomeness of fruit combined with farinaceous food as an alternative dietary is not so much an argument in favor of the vegetarian principle, as a proof that seasonable changes in food supply are helpful to the digestive processes and to nutritive changes in the tissues generally.

### She Was Too Kind-Hearted.

There is one young woman living at L'Anse, Mich., whose benevolent disposition received a severe shock last Sunday evening. She was at church and sat directly behind a tall, well-dressed stranger, with a raveling hanging to his collar. Being one of those generous-hearted, whole-souled girls who grow up to be motherly old ladies, a friend to everybody in town, she thought how glad she would be if some kind-hearted girl would do as much for her father were he to go to church with a raveling hanging down his back, so when the audience rose for the first hymn she concluded to pick it off. Carefully raising her hand, she gave a little twitch, but it was longer than she supposed, and a foot or more appeared. Setting her teeth, she gave a pull and about a yard of that horrible thread hung down his back. This was getting embarrassing, but determined, she gave it another yank and discovered that she was unraveling his undershirt. Her discomfort was so painful that chloroform would not have alleviated her sufferings nor a pint of powder hidden her blushes when the gentleman turned with an inquiring look to see what was tickling his neck.

### Improvised Furnace.

The era of the rocking chair made out of a barrel is happily over, but many pieces of furniture, which are the outgrowth of special needs are often satisfactorily developed from small beginnings. A set of bookshelves, for example, with a drawer at the bottom, was recently made by a clever woman from an old fashioned walnut dresser. The marble top she had removed, and the fine oval top swing glass was taken out of its frame to serve another purpose. Shelves were fitted in the drawer slides of the upper three drawers, the wood of these being utilized in the process. A partition was fitted up from the bottom drawer at half the depth of the bureau.

### To Remove Glass Stoppers.

It is a good thing to remember how to remove and loosen glass stoppers. Wrap around the neck of the bottle a thick rag, wet with hot water. Remove the stopper before the heat expands it. If sticky, drop a little camphene between the neck and stopper.

## USING INSECTS FOR FOOD.

Each Entomologist Has Tasted Several Hundreds of Species.

A French entomologist, M. Dagnin, recommends insects as an article of food. He speaks with authority, having not only read through the whole literature of insect eating, but having himself tasted several hundreds of species raw, boiled, fried, broiled, roasted and hashed. He has even eaten spiders prepared according to the following recipe: "Take a plump spider, remove the legs and skin. Rub over with butter and swallow." However, he does not recommend them, but this may be prejudice on his part. He states two objections to spiders. They are not insects and they feed on animal food. Cockroaches are a foundation for a delicious soup. M. Dagnin follows the recipe given by Sentor Testelin in a speech delivered in the senate on February 12, 1878: "Pound your cockroaches into a mortar; put in a sieve, and pour in boiling water or beef stock." Connoisseurs prefer this to the real bisque. M. Wilfrid de Fonvielle, the French scientist, prefers the cockroach in the larval state. The perfect insect may be shelled and eaten like a shrimp; that way Dr. Gastier, member of the National assembly of 1848, used to eat them. Caterpillars are a light food of easy digestion. Not only African and American native races, but Frenchmen appreciate them. M. de Lalande, astronomer, had dinner every Saturday with the zoologist, Quatremer d'Isonville. Madame d'Isonville, who knew his taste, collected in the afternoon all the caterpillars she could find in her garden and served them on a plate to her guest. The most popular insect food is the locust. It is eaten fried, dried in the sun, ground in flour, broiled (among the Bedum), boiled in milk (a Morocco recipe), or fried and served with rice as in Madagascar. The Jesuit Father Cambou thinks that locust flour might become popular in Europe as a condiment. Travelers' opinions on locusts differ. Amels finds they taste like shrimps, Niebuhr like sardines, Livingstons like caviare.—London Daily News.

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### SENATOR VEST'S PET ANECDOTE.

From the St. Louis Republic. Senator Vest's most famous anecdote is that of Miss Bertie Allendale. It was told when the two chambers were arrayed against each other on the tariff of 1894 and the house was insisting that the country would go without any tariff act unless the senate were prepared to forego its own schedules and adopt those of the house.

"In my younger days out west," said Mr. Vest, "I went into a variety theater one night.

"It was one of those primitive shows where the stage manager comes before the footlights without a coat and waistcoat, and with his shirtsleeves rolled up to the elbows, to announce the next number on the program.

"Miss Bertie Allendale," remarked the stage manager, appearing in one of the interludes, "who has entranced two hemispheres with her wonderful vocal powers, will now render, in her own inimitable style, that exquisite vocal selection entitled "Down in the Valley."

"A gentleman in a red flannel shirt rose in the midst of the audience and exclaimed in an impressive bass voice: 'Oh, thunder! Miss Allendale can't sing for green apples.'

"The manager, who had started to leave the stage, halted and turned. An ugly light flashed from the eye which swept the audience and finally rested on the face of the interrupter. Raising one shoulder higher than the other, letting one hand drift significantly toward his hip pocket, and thrusting his nether jaw forward in a savage way, he observed with a deliberateness which emphasized every syllable, 'Nevertheless and notwithstanding, Miss Bertie Allendale will sing "Down in the Valley."'

"And she did so. So, likewise, nevertheless and notwithstanding, the senate schedules will stand."

### A SOULLESS COMMUNITY.

From the Boston Courier: A young clergyman, just arrived at the locality of his first call, met at the railway station a boyhood acquaintance whom he had not met since they were playmates together in a remote town. After a handshake and mutual expressions of pleasure at the unexpected meeting the newly found friend exclaimed:

"But, say! What on earth are you doing in this part of the world?"

"Me?" enthusiastically replied the ecclesiast, "I have come here to save souls."

"You have, eh?" was the response. "Well, let me tell you I've been long enough in this town to know that you've struck a sinecure."

### SWEET CONCEIT.

From the Denver Times: There was moonlight and the waters of the lake glistened like molten diamonds. A thrush sang sleepily and from a boat rocking on the bosom of the placid waters came the faint tinkle of a guitar.

"What would you say," he cried in low, husky tones, leaning toward the dainty vision occupying the other end of the boat, "if I were to tell you that I think of you day and night and even dream of you?"

"Well," she replied, with a soft-stop gurgle, "I would say you were capable of most beautiful thoughts."

After that he rowed viciously.

### THE WORST OF IT.



Bride (who had eloped)—"Here is a telegram from papa."

Bridegroom (anxiously)—"What does he say?"

Bride—"All is forgiven, but don't come back."

### LAUGH ON THE TEACHER.

From the Milwaukee Sentinel: It was at the Normal school that this happened, and the class laughed. It was a laugh on the teacher, too, but he didn't get angry, although it did break into the serious contemplation of serious studies with which he was trying to interest the students. It was in the study of psychology, and they were discussing what ideas first entered the human mind when certain words were spoken or written—whether the mind thought of one certain object designated by the word of the whole general class which is embodied in that word. To experiment on this mental phenomena, in order to bring it more clearly to the attention of the students, the professor said he would write a word on the board, and then let one of them tell instantly what impression was made upon her mind. He called upon one of the pupils to be ready to think quickly and tell exactly what her first thought was, after she saw the word which he was about to write. He stood close to the board, so that the word was hidden by his shoulders

### LITTLE LAUGHS.

Classing Him. Yachtsman—"Say, that pilot you recommended couldn't steer a little bit. He was a regular bunko."

Landsman—"Ah, a bunko steerer."

### In South Carolina.

Col. Stille—"I just heard a man say, sub, that the ideal hammock was one made from the staves of a barrel."

Col. Ripp—"He was right, sub, if he meant a bourbon barrel."

### A Trade Secret.

Ida—"You have heard the expression: 'Oh, sugar!' Well, Emmaline always says: 'Oh, glucose!'"

### Corner in La Salle Street.

"Say how does Fenwick's son stand in La Salle street?" asked the Junior banker.

"Same as ever!" responded the broker. "Both feet wedge-shaped and a cane head in his mouth."

until he turned. He wrote the word "pig" and all of the class saw it except the girl who was standing ready to make reply. When he turned, he didn't get out of her way and she couldn't see the word. In reply to his sharp question:

"Now, what do you see?" she replied naively, "I see you." And the class laughed.

### FEMINE AMENITIES.



Jealous Little Girl—"What, call that a spring hat? Why, the very signs on the walls are laughing at you!"

### ARMS AND MEN.

From Detroit Journal: Once upon a time there lived two kings, by name Ethelstane and Ethelward.

Now both of these kings, simultaneously, as it chanced, dreamed of universal peace, and proposed as with one voice the disarmament of nations.

Hereupon each of the kings, Ethelstane equally with Ethelward, fell to felicitating himself upon having been the first to conceive of this excellent project.

"It is my idea!" quoth Ethelstane.

"Pardon me, it is my idea!" protested Ethelward.

At first the kings were courteous, though insistent, but presently their blood warmed, neither being at all given to yielding, until they were finally quite beside themselves with anger.

"We shall see whose idea it is!" thundered Ethelstane, placing himself at the head of his army and marching boldly into the domains of Ethelward.

"We shall indeed see!" roared Ethelward, gathering his forces to meet the invader.

During ten long years the war proceeded, with varying fortunes, until both kingdoms were devastated and depopulated. At last Ethelward fell by the sword of his foe.

"It was my idea!" exclaimed Ethelstane, not forgetting to fall on his knees and humbly thank the God of Battles.

This story of Ethelstane and Ethelward makes it very plain indeed that there are some things which cannot be settled save by an appeal to arms.

### THEY WERE ALL TIRED.

From the New York Mail and Express: The parlor entertainer has some amusing experiences, although he is not always good natured enough to tell them against himself. One who appreciates a joke, however, relates that on a certain occasion he had been performing at an "at home," and responding to so many encores that the program became unusually long.

After it was over his hostess and her young daughter came up to him, and after congratulating him on the success of the afternoon, said, most cordially:

"Oh, Mr. Blank, come and have some punch and sit down for a while. I know you must be awful tired."

"Yes," chimed in the sweet young daughter, with the best intentions in the world, "I'm sure we are."

### THE LONGEST LINE.

From Answers: He was a jolly sailor lad and had come to spend a few days in his native city of York.

"Yes," he remarked proudly, as his steamship company was being referred to in complimentary terms, "ours is the longest line in the world, stretching as it does, from America to China."

There was a moment's silence and then the hostess—a hard-working Scot—chimed in:

"Weel, I dinna ken, if ye've cause tae bounce aae much, for does not my claws (clothes) line no' stretch frae pole to pole?"

And Jack good humoredly took a back seat.