

CHEAP AND SAFE LIGHTS.

Device Has Been Invented Which Absolutely Prevents Lamp Explosions.

In Great Britain an invention which, it is claimed, gives absolute safety to all lamps, is being applied to practical uses. The device consists of a circular metal box, the size varying according to the candle power required. In the box is a deposit of salt, over which is a layer of cotton waste specially prepared.

Running through the cotton packing is an asbestos wick, woven by hand, and which is practically indestructible, and requires only occasional attention. By immersing the box in petroleum or paraffin the cotton waste absorbs the requisite quantity of oil in a few minutes through small lateral interstices. That accomplished and the metal being dried externally, the application of a light to the asbestos wick produces a bright, steady white light, the candle power being in proportion to the size of the box, the consumption of oil being less, and, accordingly, the cost being correspondingly cheaper than if the light were obtained from an ordinary lamp.

Moreover, it is claimed absolute safety is assured. The asbestos lamp may be inverted, may exhaust itself, may be thrown down or whirled about, but there is no danger, it is asserted, as there is no free oil or gas that can be ignited, and consequently there can be no fire or explosion. The patent is said to be applicable to every species of lamp, from the modest night light necessary in the nursery, through the entire gamut of domestic illumination, to the drawing-room lamp. In the industrial world it can be utilized in every direction, especially where a bright, steady light is essential, such as engine headlights and lights on ships.

The Great Northern and several Scottish and Irish railways are engaged in testing the capabilities of the new process, with a view to its adoption in railway work. Every description of lamp—the bicycle lamp, the motor lamp, the carriage lamp, lamps for domestic purposes, lamps in mines—can, it is declared, be fitted with the asbestos patent, and oil of any flash point can be used with perfect safety and with the additional advantage of considerable economy. The problem of the safety lamp would appear to have been solved.

SPRING FURNITURE CASTOR.

No matter how smooth and level a floor may be when it is first laid, it is certain to warp after a time and make everything in the room stand uneven. This might be averted by building the floor up several layers at different angles, as fine furniture is made, but it is too costly for the average dwelling. Then, too, there is another cause for furniture standing unsteady, and that



SPRING FURNITURE CASTOR.

is the natural wear of the legs from frictional contact with the floor for a time. It is the object of the castor shown in the accompanying drawing to overcome both the uneven floor and variations in the length of the furniture legs. Instead of being permanently attached to the leg this invention is only connected by means of a spiral spring, which rises from the cup on the top of the castor. The spring has a vertical stem, which is inserted in a small hole in the end of the furniture leg. The weight of the piece is supported equally on all four springs, each carrying its share of the load, even should there be considerable variation in the floor level. Thus there is no rocking of a chair, table or other piece of furniture which should rest solidly on its supports.

All Things to All Beliefs.

A certain woman of a lively disposition and much beloved in her circle says that she is a woman suffragist once a year; at the time of the annual dinner. "They have such a lot of ice-cream and strawberries," she exclaims, with sparkling eyes. The New York Times tells another story to mate with this:

A woman in Brooklyn who is active in promoting the suffrage cause in that city tried recently to induce a lively young matron to join the Woman's Republican League. She met with a flat refusal. "But your husband is a Republican, and you belong to the Woman's Suffrage Association."

"I belong to the Suffrage Association and to the Anti-Suffrage Association," was the placid reply. "I like the women in one and the refreshments in the other. But honestly, I don't believe in either!"

Idleness Discouraged.

"I see it stated that there is an alarming lot of idle money in the country just now."

"Say, I'd like the job of setting a little of it at work for a week or so. I'd have it putting in eighteen hours a day and sixty minutes every hour and nothing off for meals. Oh, I'd keep it busy all right, all right!"—Cleveland Plain Dealer.

Young man, don't turn down a leop-ear proposal because the girl can't cook. She may be able to pay your board.

Never air the faults of others until after deodorizing your own.

Science AND INVENTION

Investigating a reported discovery, Dr. Gress of Berlin has proven that radium offers no hope whatever of aiding the blind to see.

The cost of concentrating the force of sea waves must ever prevent the utilization of wave power, in the opinion of V. Martinet, a French engineer. The elevation of floats is only moderate and it takes a long time, so that the apparatus is very expensive for small power.

The process of homogenizing milk—perfected by Gaulin of Paris—consists in forcing the milk, at about 185 degrees Fahrenheit, from a closed drum in very fine jets against a porcelain plate. The fat globules are broken up into very minute particles. There is no subsequent tendency for cream to rise, digestibility is not affected, and when combined with pasteurization, the treated milk keeps a long time unchanged.

Interesting tests were made recently in the Madison Square Garden, New York, to determine the respective pulling power of horses, men and elephants. Two horses, weighing 1,600 pounds each, together pulled 3,750 pounds, or 550 pounds more than their combined weight. One elephant, weighing 12,000 pounds, pulled 8,750 pounds, or 3,250 pounds less than his weight. Fifty men, aggregating about 7,500 pounds in weight, pulled 8,750 pounds, or just as much as the single elephant. But, like the horses, they pulled more than their own weight. One hundred men pulled 12,000 pounds.

The majority of men and women, according to Dr. George M. Gould, are not only right-handed, but right-eyed; that is, the right eye sees better than the left. From this flow some curious results. For instance, right-eyedness explains why, in the development of violin playing, the difficult and rapid fingering was allotted to the less expert left hand, while the easy bowing fell to the dexterous right hand. The reason, as Dr. Gould thinks, is because the ordinary position of the violin is such that the right eye most readily sees the motions and positions of the fingers on the strings. In a similar way the right eye compels the more awkward left hand to direct the gun-barrel, while the right has simply to pull the trigger. In chopping, the weaker left arm has to direct and enforce the blow, while the stronger right plays a subordinate part for the convenience of the right eye.

A new branch of science, called "psychomechanics," has received especial attention in France from Dr. Charles Fere. His results show that a man has a greater capacity for average than for either intense or feeble work, and that one's powers vary greatly with mental conditions. Contrary to general belief, mental work does not rest one who is physically tired, or vice versa. Capacity for work increases to a certain degree with heating of the head; light has a stimulating action and darkness depresses; even colors have some influence, while sounds have a complex and variable effect; and odor and taste seem to stimulate and then depress to a greater degree. Digestion, aside from the taste-stimulation, diminishes muscular work. Most nerve poisons—including opium, hashish, valerian, alcohol, tobacco, coffee and tea—produce a transitory stimulation, and this is followed by depression, which diminishes the total work.

A "Thoughtful Thistle."

An English journal has related the amusing experience of the sculptor, F. W. Pomeroy, with a Scotch committee which came to his studio to inspect his model of a statue of Robert Burns, executed for the town of Paisley, famous for Paisley shawls, Paisley thread, Paisley pinks and Paisley snuff.

One of the committeemen was a rich and influential merchant in whose gift lay the site most desirable for the erection of the statue, and the artist naturally was desirous that it should please him. The poet was represented as a plowman, standing with his hands to the plow. In order to fill a gap at the back of the composition, the national emblem of Scotland had been introduced.

The worthy Paisleyman surveyed the work for some time in silence, and then in broad Scots requested the sculptor to "Tur-rn it round, mon." Mr. Pomeroy did so, and expressed a hope that he was pleased.

"Tur-rn it round, mon," said the merchant again.

Again Mr. Pomeroy complied, and again tried to elicit an opinion. Meanwhile the critic, quite ignoring Burns, stood with his eyes riveted upon the emblematic detail.

"The Scotch thistle," he broke out at last. "Mon, but ye've put an awful lot o' thocht intae it!"

The "thoughtful thistle," as the artist afterward termed it, won the day and the site.

A Modest Briton.

Like the traditional Englishman, Arthur Stanley, Dean of Westminster, wore home from his first visit to America an expression of amazement which only time could efface.

He was at once beset by interviewers, says the author of "Out of the Past," who asked the usual questions. "What was the thing which most impressed you in America?" was one of these. Without a moment's hesitation Dean Stanley replied:

"My own ignorance."

WHEN THE CLOCK TICKS LOUD.

There are times when life is something more than meat and drink and sleep; when the surface shows no ripple though the stream is swift and deep; when the good that's in the worst of us has taken us in tow and has fanned love's fading embers till they flash again and glow; when we feel there's something in us that has escaped the madding crowd—when it's quiet in the evening and the clock ticks loud.

When the grate fire's crimson afterglow is grayling into gloom, when there's none but she and you within that cozy little room, when the cat upon the hearth rug yawns and drifts again to dreams, then how very like the heaven we have learned to long for seems that delightful little chamber with the magic charm endowed—when it's quiet in the evening and the clock ticks loud.

Not a word to break the stillness, yet there's music in the air—music born of softest silence, music sweet and low and rare; for the one who sits beside you is your sweetheart, and you know that she loves you, for she weeps you many patient years ago; and her love songs, born of silence, make you brave and great and proud, when it's quiet in the evening and the clock ticks loud.

—New York Times.

A Converted Clergyman

THE Reverend Boswell Holland sat alone in his study. The room which, though small, had been dignified with the name of study, was the best and pleasantest room in the house, and in it were drawn together all the best that the house afforded—here was the prettiest paper and the best carpet, the only lounge, the easiest rocking chair, the gayest table-cover, the best lamp, and the prettiest ornaments, all gathered here by his young wife's unselfish devotion, and her husband's devoted selfishness.

A tall, stout, well-made, florid young man, never intended by nature for an ordinary life; one whose broad shoulders and strong arms would have made a better and healthier man of him in the field or workshop; one who as a farmer or machinist might have made something of his muscular inheritance, but who had been thrust into a position he was wholly unfitted for by the weak ambition of a doting mother and the vanity and self-indulgent indulgence of his own character.

A gentle step, a timid deprecating tap at the study door. "Eyes right—attention!" In one moment, like a soldier on drill, the reverend gentleman had wheeled into position at the table, reached up a pen, dipped it into the ink, and held it suspended over the paper, as he said in the half-annoyed tones of a person suddenly disturbed in some absorbing train of thought:

"You can come in."

Softly the door was pushed ajar, and a sweet young face, fair and fresh as an apple blossom, and framed in braids of soft brown hair, peeped timidly in.

"Quite alone, dear?" she asked, glancing round the apartment; and then satisfied that he was so, the wife came in—a girlish figure, though one arm clasped her sleeping baby to her bosom; in the other hand she bore a small tray with snowy white cloth. Pausing a moment on her way to deposit the child among the cushions of the lounge, she came to her husband's side.

"What have you got there, Lucy?" he said in half-reproachful tones, though his eager eyes contradicted his assumed indifference.

"Only a little lunch for you, dear," said the little wife, coaxingly, and she removed the desk and set the little tray before him.

"You silly child! what is it?" Lucy raised the cover and revealed a small juicy beefsteak, temptingly cooked, a biscuit, and a cup of steaming tea.

"Oh, I have not any appetite; I do not want it," said the husband, making a very faint demonstration of pushing it from him.

"Yes, you do, dear; I know best. Did not you tell me yourself that brains needed food, and that mental labor was more exhausting than any other? Take a little sip of the tea first, dear, and maybe that will bring an appetite."

"You are a little goose, Lucy," said the Reverend Boswell, as he took the cup from her hand; and so, just to please the affectionate little thing, he ate and drank all she had provided—and he did it, too, just as if he relished every mouthful. You would never have guessed he did not relish it. Oh, he was such a good man! And Lucy sat by, delighted that her idol had condescended to accept her meat and drink offerings.

"There now; those poor, dear, tired brains will feel all the better," she said, laying her soft hand carelessly on his low brow. "It is too bad for you to sit here, hard at work, all this lovely day; but tell me, have you worked very hard this morning?"

"Well, no, not very," said the self-convinced idler. "It is too warm to do much."

"Warm here, dear?" said Mrs. Holland, glancing round the cool, fresh, orderly little room, and contrasting it with the kitchen, the heated scene of her own labors. "Then it must be because you feel weak; do you?"

"I thought you would come up and read for me, Lucy; I have been expecting you."

"But I could not come to-day, you know," said the wife, deprecatingly. "It's washing day!"

"Well, what if it is? You do not wash, I presume?"

"No, dear, not exactly; but Katie does."

"But you are not Katie."

"I beg your pardon, but I am on washing and ironing days."

"What do you mean?"

"Only, of course, that when Katie is washing, I have her daily work to do."

"I do not see what great amount of work there can be to do in such a family as ours."

"That is because it is not in your line, Boswell. If it was you would soon find out that there is work to be done in every well-managed family, however small; and where there is a baby, and only one experienced servant, there is a good deal of work to be done."

"Work, work!" said the parson, fretfully. "One would think to hear you talk of your work, that we lived in a palace and entertained company every day of our lives."

"I am very thankful that we do not," laughed the sweet-tempered little woman.

"Well, I can't understand it, I'm sure. Do tell me now what have you had to do this morning?"

"I will," said Lucy, seating herself on the lounge by her child. "It is a fine day, and Katie has a very large wash; so I set her at work early, and I made the beds and put the rooms in order, and then I cleared away the breakfast things, and swept and dusted the parlor and entry; and I put fresh flowers in the vases, and I picked and shelled the peas, and made the pudding, and cooked your steak, and tended the baby—"

"Well, he is asleep."

"Yes, he is now; but he was wide awake all the morning, and just as cunning as he could be. I only wish you had seen him when I—"

"Oh, yes, I dare say; but I don't care to hear about it."

Lucy bent down over the sleeping child to pat and kiss him, and when she raised her head there was a tear on the baby's dimpled cheek. Poor little thing! Had he been weeping in his sleep? for the mother's fair face was as unruined as before.

"Are you coming to read to me, Lucy?"

Lucy hesitated.

"I will if I can—after dinner."

"Oh, I am going out to dine with the Allens."

"You are! Why, Mr. Holland, you did not tell me!"

"No, I did not think of it; and I do not suppose it makes much difference to you."

"I thought it would be a good day for you to go over to see that old deaf Mrs. Otis. I hear she tells everybody she does not know her minister by sight."

"Well, she won't acquire that knowledge to-day, any way. Mary Denny promised to call for me at the Allens', and take me for a drive in her pony carriage down to the lower mills at the Pond, and that is much pleasanter."

"Of course it is; and such a lovely day, too. You will have a charming ride. I am so glad! It will do you good to leave your writing, I am sure."

"Yes; but about that old Mrs. Otis; can't you go there instead of me? You might."

"Of course I could. But she is so cross I am half afraid of her; and besides, it is you she wants to see, not me."

"Let her take the best she can get," said the unconscious egotist; "I can't go."

"Shall you be home to tea, Boswell?"

"I rather think not. Mary said she would leave me up at the Whites' on our way home; they are to have the choir up there this evening; they said something about your coming, but I told them it was of no use to ask you, for I knew you would not leave the baby all the evening."

"Of course I could not," said the wife, picking up her baby and the tray. "You will have a beautiful day; I half envy you the nice ride; but I'm sure you need it, and if I were you I would not write another word to-day. Just lie down on the lounge and take a nap, and you will be all rested and bright by dinner time. If any one calls I will say you are engaged (you are, you know, engaged for dinner) and I'll call you in time to dress, and bring you some hot water. Now take my advice," and nodding and smiling, the unselfish woman drew down the shades and left him.

And this was but a sample of their daily lives.

Mrs. Briant, Lucy's mother, was a widow of some property. After the marriage of all her children she had broken up housekeeping, and had been making a long visit to each of her two

married sons, and now she wrote to say if it was agreeable to Mr. and Mrs. Holland, she would come and make them a visit of a few weeks.

Of course Lucy, who was the youngest child and only daughter, was delighted. She came, all tears and smiles and blushes, to show the welcome letter to her husband. Of course he was not quite so much elated at the prospect; it was not to be expected he should be; and most wives would have resented his unsympathizing coldness; but Lucy had such a pretty, winning way, and then she had, all unconsciously, learned the habit of arguing with him through his own interests.

"Mother is so cheerful," she said, "and so pleasant, you will find her excellent company; and then she is such a splendid housekeeper, and knows everything, and Katie and I are so inexperienced. She is a capital cook, too, and makes things go as far again as I can. And such nice things as she can make! I am only afraid after she has been here you will think I don't know anything; but I shall keep my eyes open, and try to learn her way of doing things. I did not think half enough of it while I lived at home. And then she has had so much experience with children, she is as good as a doctor; and I am such a little goose if anything ails the baby; but I shall feel as if he is all right if I can pop him into mother's arms, and I shall not have to rout you up at night to go for the doctor every time he screws his dear little face up into a pucker; and then she is so fond of babies I dare say she will tend him half the time; and think how much more time I shall have to read to you and make parish calls!"

In due course of time Mrs. Briant made her appearance. She was a delicate, pleasing, lady-like little woman, with sweet brown eyes and a marvelously sweet voice, that "excellent thing in woman." Never yet came Nemesis in gentler form or more alluring guise; but it was Nemesis all the same. She was an acute and observing woman; there was quiet but keen penetration in those soft brown eyes, but there was no bitterness about her.

She read her son-in-law's character at once; the soft brown eyes went straight through his shallowness down to his selfishness and indolence. Of course her motherly instincts were all on Lucy's side, who, she saw, was drooping under a burden of care beyond her strength; but she never thought of making her unhappy by pointing out her husband's faults to her; on the contrary, she always praised him wherever she conscientiously could, treated him with marked deference, and made him more comfortable in a dozen little ways, while she was all the time quietly loosening his wife's bonds and transferring them to him.

"Mr. Holland," she said to him one day, in her sweet, gracious way, "will you have the kindness to pick up some peas for dinner to-day?"

"Me? I pick the peas?" asked the astonished son-in-law.

"Oh, no, no," hastily interposed Lucy. "I will get them; I was just going."

"My dear child, no! The vines are wet with last night's rain; and with your thin dress! I would not have you do it for the world; and I am sure Mr. Holland would not hear of such a thing."

"No, not certainly not," said the reverend gentleman; "it is not fit for her, of course;" though he remembered unobtrusively how many times she had done it, even in the rain. "But cannot Kate get them?"

"I do not think she can," said the gentle voice; "she is very busy ironing your shirts, and she does them very well, but she is very slow. I could shell the peas if I had them; but it is no matter; if you do not care about them, we will do without. We have only plain boiled corned beef to-day, and I thought you would like some vegetable besides potatoes with it; but please don't go if you don't want them."

But Mr. Holland was an epicure in a small way, and he did not fancy a dinner of beef and potatoes. So he went, and from that day the picking of the peas, beans, cucumbers and tomatoes was, without any talk, dropped quietly into his hands.

And so with many other little out-of-door duties which usually devolve upon the master of the house, but which Lucy, in her loving eagerness to spare her husband time and trouble, had indiscreetly taken upon herself; Mrs. Briant laughingly accused her of over-zealousness, quietly took them out of her hands and restored them to their rightful owner. And all this was done so sweetly by the amiable lawyer that neither party could gainsay her, and the mystified minister really felt she was sustaining him in his rightful authority. Indeed, he was morally and physically a better, happier and more useful man for the healthy out-of-door employments to which her sagacious administration had subjected him. He dawdled less with his pen, and wrote better when he did write.

By the time Mrs. Briant's visit drew near its intended close, the gentle little tactician had her levitation pretty well in hand; for though quiet in her advances as the incoming tide, she was quite as irresistible. Lucy, cheered by her mother's presence and silent support, and set free from the household bonds that had so oppressed and enthralled her, was herself once more. She had regained her natural elasticity of step and feeling, and brought out by her mother's judicious management she had taken and worthily filled her proper place in the parish as the minister's wife, and was beloved and respected in the congregation.

"I have been thinking, my dear Mr. Holland," said Mrs. Briant in her most

mellifluous tones, one day when the soup she had presided over had given him great satisfaction, "that after I leave you, Lucy had better have a second girl."

Mr. Holland looked up in blank surprise, and calmly and sweetly the lady went on:

"Katie, though a good girl as far as she goes, is very inefficient. She is honest, but she is a miserable cook, and very wasteful. But all such young girls are; they waste half enough to keep a family. And the washes are very heavy; gentlemen and babies," she said, with a rippling laugh, "make a great deal of washing, you know, and Katie is very slow, and if you have to put it out that is very expensive. And then there is so much sewing to be done. I did hope we should find time to make up your new linen before I left, but it is not out yet, and Lucy will never get through a dozen shirts alone. Poor girl! the parish and the baby make such heavy demands upon her time, I think she will have to put your shirts out to be made." And with a few pleasant remarks about the parish and the weather, she smilingly withdrew.

But the good seed had been carefully sown. The parson, though not over-wise in general, was sharp and shrewd where money was in question, and knew the full value of dollars and cents. He took the matter into consideration, nicely balanced the pros and cons. He knew that Mrs. Briant, in her quiet, lady-like way, had been very efficient in his family; she superintended the cooking, and under her direction were prepared the savory meats that his soul loved. He knew, too, that since her advent among them his weekly expenses had been lessened, not increased. He knew that the liberal board which she had insisted upon paying ever since she had been with them amounted to half as much as his salary, while her generous gifts supplied many needs of the little household. He knew that she relieved his wife of much care and labor; and that her experience during the baby's troubles in the ivory business, upon which he had just entered, had already saved him the fatigue and expense of many a visit to the doctor; and all these loving services were freely given. On the other hand, if she left, all this must stop. An additional servant would cost him three dollars a week, to begin with, and how much in waste and discomfort? And as to putting out washing and sewing, those were bur-burbs of unknown expense which he could not estimate. The parson drew his conclusion—he was used to that business; "in conclusion" was his favorite portion of his sermon—so, in conclusion, he requested Lucy to invite her mother to become a permanent member of the family; and Lucy, who in her unselfishness thought dear Boszy did it all for her sake, could not express her joy and gratitude.

And now you know the reason the Reverend Boswell Holland resembled St. Peter. Don't you see? He had a "wife's mother" in the house!—Wave-ry Magazine.

VALUE OF THE PERSIAN GULF.

View Expressed by Warren Hastings Nearly Ninety Years Ago.

In the autumn of the year 1814 a young naval lieutenant arrived at Spithead. The frigate Undaunted, of which he was first lieutenant, had just taken Napoleon to Elba, and had arrived at Spithead to be paid off on the general peace. Lieut. Hastings bestowed him that he was within a few miles of the most illustrious member of his race and he turned out of his way to call at Daylesford house and pay his respects to Warren Hastings. He was cordially welcomed by the great governor general of India, whom he found, as he described him to the writer of an article in the New York Tribune, "a little old man, with a black velvet cap on his head, sitting by the fire in his library." A good deal of conversation ensued. Warren Hastings inquired with interest where the young lieutenant had served and, after narrating his experience in the Mediterranean, not forgetting, we may be sure, his personal acquaintance with the Emperor, Lieut. Hastings went on to say that he had also cruised in the Indian ocean, and had been for some time surveying in the Persian gulf.

At the mention of that sea, Warren Hastings became voluble. "Ah," he said, "that is the most important position in Asia—one of the most important in the world." And then, after a short pause, and raising himself in his chair: "If I were the war minister of the Czar I would not spend time and effort in striving to get to Constantinople by the way of Europe; I should endeavor to occupy Persia and to establish myself at the head of the Persian gulf. I should then be in a fine position. I could strike at India with the one hand and at Asia Minor with the other; I should take Constantinople in the rear." These words were uttered with remarkable animation and clearness, and with a conviction which showed that the famous diplomatist and ruler had mastered the facts and thought out the subject.

No Incentive.

"Hank Henders tells me his son Spink got expelled from college for getting up in the middle of the night and painting the gates green."

"Ah! that's strange? I mind the time Hank wanted him to paint the front stoop an' couldn't hardly get him up in the middle of the day."—Brooklyn Life.

If a young man attempts to kiss a girl during the courtship he hates him; after marriage she hates him if he neglects it.

A distant relation is one who is rich and doesn't recognize you.