

SELWYN UTTERTON'S NEMESIS.

Selwyn Utterton's wife lay dying. A nurse sat by her side, but Selwyn Utterton himself was out visiting his patients. He had a passion for his profession, had Selwyn Utterton. So trivial a circumstance as the mere fact that his wife lay dying at home—it was a perfectly normal case of tuberculosis of the lungs—would never for a moment have kept back that devoted man of science from watching with interest those beautiful complications of typhoid and diphtheria that were now strangely prevalent in the back slums of Westbury. Marion propped high on her pillows, and gasping for breath, wondered once or twice to herself whether she would live out the day till he came back again to say good-bye to her.

"Nurse," she murmured feebly at last, rousing herself beyond her strength in a final effort. "I can't die till I've written a line that's haunting me. Lift me higher just a minute, please; give me a pencil and paper."

"An envelope, nurse," she said again, half inarticulately, as she finished the writing; and the nurse handed her one from the drawer in solemn silence.

The poor pale girl—for she was barely 24—directed it in the same spasmodic, deep-digging way, and then passed it across with a long breath to the nurse at the bedside.

"Nurse," she said solemnly, looking deep into the woman's eyes, "promise me one thing before I die. Keep that note while I live, and give it up to no one; but as soon as I'm dead, put a stamp on it and post it!"

"Yes, dear," the nurse answered low, holding the white hands in hers, and stroking her hair tenderly. "I'll do as you say. Poor child; God bless you!"

There was a minute's pause; then a man's light foot echoed faintly on the stair. A gentle, soft foot as becomes a doctor. The door opened noiselessly without a motion of the air, and Selwyn Utterton entered. A handsome man, with a beautiful face—cold, clear-cut, intellectual.

He moved over by the bedside with a soft, velvety tread, and took her hand in his, but it was to feel her pulse. "Too high, too high!" he said, shaking his head and frowning. "She'd better be alone for a while with me. You talk to her, nurse, and disturb her. You may go down for the present."

As soon as she was gone Selwyn Utterton yawned, stirred the fire into a blaze with meditative pokes, regarded the thermometer with medical care, and then stood with his back to the hearth and his hands crossed behind him. His wife turned her eyes to him, but said not a word. Selwyn Utterton regarded her with a stony stare, yawned a second time, pursed his lips and his brows, and took up the sheet of white paper that lay upon the table. It was the under sheet of the quire on which Marion had written.

He took it up mechanically and quite at random, but its appearance surprised him.

"Hello!" he cried, with a start, looking close at the furrows pressed deep into its surface. "Why, how's this, Marion? I say, you've been writing!"

"The dying woman's face flushed fiery red, and then, in a moment, grew pale as death. 'Give me that paper Selwyn,' she exclaimed, half raising herself on the pillow with a convulsive effort! 'Give me that paper! I want it.'"

"No, I won't," her husband answered, regarding it still harder, in an attentive way. "My need is greater. This is odd—precious odd. I can't make it out. But you've been writing, it seems to me . . . to Elsie Maturin."

Marion fell back upon the pillow and gasped. "Oh, Selwyn," she cried, clasping her hands, "I'm dying! I'm dying! Have you no pity? Give it to me!"

The young man made no answer but strolled over slowly to his medicine chest, and selecting a bottle and brush with seeming carelessness, smeared something dark in broad washes across the face of the paper. It was iodine liniment. The furrows in the paper caught the coloring matter at once and he could read the letter almost as easily as if it were written in ink. "This is odd," he repeated. "Very odd. You dug your pencil too deep; the page tells tales. I wonder you could write so, Marion, about your own husband. You're a wonderful thought-reader! How on earth did you know I cared for that girl? For your own sake, Miss Maturin, not for mine, I write from my dying bed to put you on your guard against Selwyn Utterton. He has heaped to kill me slowly by long neglect, partly because he's tired of me, but partly also because he wants to marry you. Oh, trust me and refuse him. He never loved me—he married me for my money, and then he tried to kill me. That's not true, you know, Marion, the phthisical tendency's hereditary in your family. 'He loves you now, and he'll love you for twelve months and then he'll tire of you. For heaven's sake take my advice and have nothing to do with him! Well, anyhow, you've put it plain enough, I must say! Has this letter been posted?"

"No," the dying woman answered with a groan. "But it will be—it will be."

Selwyn crumpled up the copy carelessly in his hand and flung it into the fire without the faintest show of ill-temper. "It won't be," he said, slowly. "Nurse has it, I'm sure. And she shan't go out of this house alive till she's given it up to me."

With a sudden burst, his wife sat bolt upright in the bed and glared at him fiercely. "Selwyn Utterton," she cried, in a very terrible voice, "if you dare to do that my feet will follow you to your grave. They'll dog you day and night. They'll never for one moment leave you or desert you."

She fell back upon the pillow with a fall like lead. Selwyn Utterton stepped across and gazed at her sullenly. Her lips were black; her eyes were vacant. He rang the bell for the nurse. "She's dead," he said, quietly. "She's been over-exerting herself again, and this is the consequence. Internal hemorrhage, of course—due to your carelessness. Give me that letter she wrote. You've got it in your pocket."

"I won't," the nurse said, trembling, but facing him like a man. "It was her very last wish. You've killed her yourself. But you shan't have her letter."

Selwyn Utterton stared sternly at her for half a minute. He never opened his lips, but taking two steps forward, he caught both the nurse's hands in one of his own, and twisted them painfully. With his other hand he made a sudden dive into her pocket unawares for the letter. "Oh! I won't, won't I!" he cried, holding it aloft above his head for a second in triumph. "There are

two opinions about that!" Then he flung it into the fire and watched it burn slowly.

Selwyn Utterton, though calmly callous for a cultivated man, was a profound believer in the supernatural in every day life.

So Marion's last words caused him for the moment some little inconvenience.

For the next two nights, in spite of his outer calmness, Selwyn Utterton lay awake many hours on his bed, tortured by strange doubts. Could Marion be standing as she threatened, cold and white, by his bedside? Would her feet really follow him, as she said, to his grave? Her feet—those white feet, those pale, thin feet—would they dog him through life?

On the third night Selwyn Utterton sat up late by himself in the surgery, over a smouldering fire. He was afraid to go to bed in the next room to Marion, while Marion's body yet lay there cold and unattended. Marion's feet, she had said, would follow him to the grave! Those small white feet! Those pale, thin feet! He hated them. He dreaded them. He would be even with her yet; as he had been even with her over the note of Elsie Maturin.

He moved across to the cabinet in the corner and opened the door of it with some faint hesitation. Then he seemed to make his mind up and selected from his instrument case, a surgical knife and saw. For a moment he surged again; then he moved to the door. He opened it softly and listened once more in the hall. All, all was silent. With a cat-like tread he began mounting the stairs, a candle in one hand and the instruments in the other.

For ten minutes or more he was gone. At the end of that time the door opened once more, and Selwyn Utterton stole back again, solemn, grim and cynical. Under his arm he carried a small white paper parcel.

He stirred up the embers and poked the fire into a blaze. Then he put on fresh coal, heaping it higher and higher. Bit by bit he built up a great bank of fuel, rising high into the chimney, red hot in the centre. Meanwhile, the paper parcel lay unheeded on the rug. He was stoking with all his soul putting his very heart into it.

By-and-by he rose again, undid the parcel, placed the contents gingerly on a surgical board, took some phials from the cabinet, and poured two or three liquids, one after another, on the mysterious bundle. Some of them smelt strong, and some hissed faintly. After that he broke down the bank of red hot coal, spread it abroad in the grate with the poker, and laid the bundle softly in the midst of the scorching fuel. With a hasty hand he piled more hot embers on top, and arranged fresh lumps from the scuttle over all in a glowing pyramid. Then he sat in his arm-chair and watched it burn slowly away—watched it burn away, bit by bit, to indistinguishable ashes. Selwyn Utterton never went to bed at all that night.

He sat up in his chair by the fire till morning, and when the servants came down at seven o'clock to clean up the room they found him sitting there still, nodding and dozing dreamily.

That day Marion's corpse was safely buried, and Selwyn Utterton breathed again. She could never follow him to his grave now—that lame and halting ghost. She could hobble around the world, and he was free to make love to Elsie Maturin.

In the evening he sat by the surgery fire once more a bachelor at large, relieved from all fears of Marion's vengeance.

Just to while away the time, however, he took down from the shelf a medical book, and skimmed it with interest for half an hour, for he loved his profession. His eye fell casually on a spiritualist treatise. It was a well-learned book by a half-crazy Frenchman. The page he hit upon contained a vivid account of the change of opinion which came over the ideas of early men with the progress from burying the dead to burning them.

Only by burning them, the author said, with dogmatic conviction, could the inmost and most genuine ghost of things be finally set free from the material body. It had been noticed in countries where burning still prevailed that if any portions of a man's body remained unconsumed by the funeral fire his ghost was apt to reappear to survivors lacking a hand or an arm, as the case might be, and to beg piteously for the liberation of the missing member. Thus, at Masulipatam in 1873—but Selwyn Utterton read no further. Instead of that he flung down the book by his side with a cry of horror.

And well he might, indeed—for there on the hearth before him a hideous sight stood revealed to him as clear as daylight.

Two severed feet stood close together on the tiles of the grate, inside the fender, as though they had stepped that minute out of the glowing fire-place and supported an invisible body above them.

They were just two feet—no more—sawn deftly across by surgical skill through flesh and bone and a little above the ankle. Two small white feet. Two pale thin feet. Distinct and clear, yet transparent and intangible. They stood there and mocked him. It was she who had outwitted him.

Selwyn Utterton sat and gazed at them in horror. As he looked the feet rose slowly, first one and then the other, and stepped across the fender and moved toward the other arm-chair by the fire. One of them planted itself firmly on the ground, and the other hung in mid air inclined at an angle, as if the leg to which it belonged was crossed over its fellow. Some mysterious creature seemed to be seated in the chair unseen, and only the feet appeared to have made themselves definitely visible.

In an agony of alarm Selwyn Utterton sat there, horror struck till nearly eleven. He dared not move from the spot. He dared not speak or cry. Those spectral feet kept him riveted to his place. He just sat and gazed blankly at them.

But the feet sat on, and took no notice of him in any way. Now and again they uncrossed themselves, or changed their position for greater ease or comfort. But for the most part they simply sat and glowed and glared at him, as it were, from their raw-cut edges.

At 11 o'clock he could stand it no longer. He rose and moved in a maze to the door. The feet rose at the same moment and stepped across the room, foot by foot beside him. He turned out the gas and made hastily for the passage. If possible he would dodge them and shut them in behind him. But the feet were too quick for him—those slender, agile feet. They glided out as he passed, and waited in the hall to see where he was next going. He turned to the stairs. The feet trampled after him, one step at a time, following close to his heels—just as Marion had promised. He bolted into his bedroom. The feet rushed in behind him. He flung himself on the bed, clothes and all, and covered his face in wild awe with the sheet and counterpane. But he could not

rest so. After a few brief minutes of this unmanly panic he opened his eyes and looked again. The feet sat patiently on the floor by a chair at the bedside. They would sit there all night, he felt certain in his own soul.

Selwyn Utterton was no coward, in spite of his love for occult science. He braced himself up, and regarded them fixedly. If the things meant to stop there he might as well, first as last, get accustomed to facing them. He rose with his eyes still firmly fixed on those ghastly phantoms, and undressed slowly. And still they haunted him. He turned out the gas and stepped into bed. For a minute or two he kept his eyes tight shut as before. Then curiosity overcame him. He opened them once more. The room was dark, but through the slit in the blind a little moonlight penetrated into it. By that uncertain gloom he could see them still, sitting patiently by the bedside, in the attitude of one who was watching him closely. Marion had been as good as her word. She was dogging him now, and she would always dog him.

After a night spent half in sleep, half in gazing between whites at those pallid uncomplaining feet, Utterton rose and dressed himself and went down to breakfast. The feet followed him downstairs—pitter-patter, pitter-patter—with a ghostly tread, but he alone seemed to hear them or see them, or notice them in any way. While he breakfasted they sat at the easy chair by the fire, warming themselves alternately, with outstretched soles held up to the grate, for it was a very cold morning. When he finished they rose and shifted all noiselessly to the opposite chair. He took the paper in his hand and pretended to read, but out of the corners of his eyes, he felt sure all the time the feet were still keeping close watch from their place upon him. The feet followed him to the door and out into the street. It was a muddy morning and Selwyn Utterton, looking close at the pavement, saw that the feet as they passed, left no mark upon the gray slush that flooded the flagstones.

He stepped into the carriage; the feet mounted behind him, one after another on the step of the brougham; muddy as it was, they remained pure and white and deadly pale as ever.

All that day, as he went on his rounds, the feet, unabashed, still followed him everywhere. As he stopped at each house they got down from the brougham, with slow deliberateness, and stood waiting at the door while he knocked, and trooped after him up the stairs, and sat expectant by a chair at the patient's bedside. From house to house they took to the brougham again, a d settled themselves down as if they belonged to a person sitting on the opposite seat with her back to the horses. But all the time they remained cold and white and rigid as ever—a pair of naked bloodless little feet, corpse-like in their pallor, and out visibly off just above the ankle.

Day by day this went on, and Selwyn Utterton at last grew almost accustomed to it. Hard, stern man that he was, he persisted in his own way; he wouldn't allow those spectral feet to turn him for one moment from his fixed purpose. Months rolled by and the period of decent mourning began to go past, and Utterton paid his court notwithstanding the feet, to Elsie Maturin. She was a tender, beautiful, simple-hearted girl, little Elsie, who had known hardly anything of Mrs. Utterton while she lived, and who was innocent of all blame as Marion herself could have been.

One summer evening he met Elsie on the path across the fields after his work was done and walked home by her side, thrilling inwardly with pleasure. Elsie walked beside him, all tremulous, much wondering what he could mean. She knew he loved her; she knew he wished to marry her; what on earth, then, made him hesitate when he must see she loved him?

At last by the little foot-bridge over the stream Utterton paused for a moment and plucked up heart of grace, without one word of warning to take her small hand in his and say abruptly with the directness of simple heart-felt passion, "Oh, Elsie, why should we two fence and parry any longer? I love you! You love me! My Elsie, will you marry me?"

And Elsie holding his hand all trembling in hers, answered in quivering accents, with a rose-red face, "Mr. Utterton, you know I love you well. You know my answer. What need for me to tell you?"

In a tumult of delight Selwyn Utterton stooped down and kissed her daintly, small hand with eager haste. They two were quite alone. He glanced up and down the path. There was nobody near. Her blush was so tempting. Her lips were so red. Dare he, oh, dare he? "Just this once, Elsie," he murmured, "to seal our compact!"

And as he bent his head to kiss her he saw close by upon the ground two pale, white feet, standing tip-toe, all intent, as of one who listened and strained every nerve to hear what they two were saying together.

Day by day, hour by hour, through that ill-omened courtship, those two white feet still pursued Selwyn Utterton, relentlessly, remorselessly. Time after time he sat with Elsie alone in the dusk of blind man's holiday holding her wee hand like a lover in his and whispering in her ear those fervent nothings that all lovers on earth for a thousand centuries have whispered in vain—and all the while that pair of silent ghostly watchers stood by or leaned forward and checked every word he spoke with sardonic approval. Sometimes they took up the attitude of one who laughs a bitter laugh; sometimes of one who smiles cynical incredulity; sometimes of one who looks on at a poor girl's ruin with pitying sympathy.

When they turned towards Utterton they turned with defiant boldness; when they turned towards Elsie they turned with infinite sadness and commiseration. Never for one moment did they leave him alone with his love in quiet. At every turn, as Marion had promised, they dogged him and outwitted him.

But Selwyn Utterton was made of sterner stuff than could be turned away from his purpose by any ghostly phantom. Feet or no feet, he meant to marry Elsie. Let them dog him to his grave, he said to himself more than once, he would go on none the less, as though he never perceived them.

So at last the day of his wedding was fixed and Elsie's dress was made, and the guests were bidden, and all arrangements were complete.

That evening Selwyn Utterton sat up late by the fire-side. He sat quite alone. Strange to say, for once, the feet had deserted him. He sat and told himself day dreams like any other lover.

About 12 o'clock he went up to his bedroom and turned on the gas and began to undress himself. A new frock coat had come home for him to be married in—a wedding garment of the most correct description. The housemaid, not to crumple it, had laid it upon the bed. Selwyn Utterton glanced at it, and was just going to hang it up on a peg behind the door. As he did so a terrible sight met his eyes indeed. For the first time in their acquaintance the feet had turned aggressive.

They were seated firmly—nay, doggedly, resolutely—on the coat, so that he couldn't remove it without touching and displacing them. But they wouldn't be dispossessed. He saw in a moment from the doggedness of their attitude what the feet were driving at. Somebody had planted herself all unseen on the bed, with her arms clasped around her knees, and her teeth clenched, though, as usual, nothing but the feet was visible. He dared not disturb them; he was cowed and terrified. These feet meant mischief. They never would budge from the post they had taken.

Slowly and mechanically he drew up a chair and sat opposite the feet, still staring at them blankly. The feet stood still, and stared back at him in defiance. His blood ran cold. He stared, and stared, and stared, and shivered. Vague terrors filled his soul. This was Nemesis, Nemesis! He never could venture to wear that coat. He never could creep into that cold bed again. He must sit up all night; and it was chilly weather.

With his eyes still riveted on the feet he sat there motionless. One o'clock struck, then two o'clock, three o'clock. About half-past three the feet grew slowly dim. He was conscious of a cold chill that ran faint down his spine, he was conscious of a nameless implacable terror. His eyes started from his head, his brain swam vaguely.

The feet and the world seemed to fade before him.

Next morning when the servants knocked at the door they received no answer. The housemaid turned the handle and gave a loud scream of alarm. Selwyn Utterton sat bolt upright in a chair by the bedside, gazing with fixed eyes at a point in the wedding coat, and as still as marble. He was stark and stiff. The rival doctor believed he had died some hours ago.

Always a dabbler in the occult, the evidence before the coroner's inquest said, and he died of terror his head was all full of strange ideas and beliefs. He had seen a ghost, folks guessed. But anyhow, it was certainly fear that killed him.

And the doctor who conducted the post-mortem observed, with interest, that two diseased spots were noticeable on either retina, spots with such a distribution that they must certainly have shifted from point to point as he altered the focus of his eyes, and he would no doubt produce during life the distinct illusion of some vague white body or bodies in the foreground, perhaps with a faint halo or rose-pink extension.—[Grant Allen.]

O Tell Me, Is it Love.

I'm feeling very strange of late;
All is not right I fear.
My mind is approaching such a state
I were mild to call it queer.
It first began with writing verse,
And sending rhymes for "dove";
But now it's daily growing worse—
O tell me, is it love?

I spend my fortune in perfumes;
My candy bill's immense,
I buy the rarest kind of blooms;
Regardless of expense,
I pose before the glass and smug
In every sort of way;
I turn and bow in every style—
Now, is it love? O say!

To woman's charms so long quite proof,
Smiles, blushes, dimples, all,
From each bright snare I held aloof,
And viewed my comrades fall.
Who would have dreamed that ever I
Would keep a female glove,
And blush and kiss it on the sly—
O tell me, is it love?

I do not eat enough to keep
A hummingbird alive.
They say I babble in my sleep
Such honeyed thoughts I live.
I know I stammer when I speak;
My hands are in my way,
A certain doorstep makes me weak—
Now, is it love? O say!

I used to laugh at stars and moons
As only fit for "chaff."
Now I go humming old love tunes
And hardly ever laugh.
I seek by night a vine-wreathed house,
And watch a light above,
Then sneak away just like a mouse—
O tell me, is it love?

Within my brain queer fancies come,
And problems strange and new;
If one lives on a certain sum,
How much will serve for two?
And then anon I'm darkly sad,
And then I'm wildly gay.
O tell me, am I growing mad?
Or is it love! O say! —[S. M. Peck.]

Why British Emigrants to Brazil Have Failed.

The British Consul at Santos, in Brazil, in his last report gives a number of reasons for the failure and misfortunes of recent British emigrants to Brazil:—(1.) The Brazilian agents sent to recruit labour in Europe extended their operations to Great Britain, though instructed to confine them to Latin races. (2.) Though instructed to recruit agricultural labor only, and receiving a commission for each emigrant engaged, they eventually registered any individual who said he was an agriculturist. (3.) The bulk of the British emigrants engaged were consequently mill hands and people of no occupation from the manufacturing towns, who would have failed anywhere as agriculturists, even in a British colony. (4.) The emigrants were deceived and deceived themselves as to the nature of the work required of them, the food they were to receive, and the value of money in Brazil. (5.) Their habits were totally unsuited to a tropical climate, so that many felt sick at the outset. (6.) They could not speak or understand a word of the language.

Ditto.

"Lor, Mary, how I do love you," remarked a rustic to his sweetheart.
"Ditto, John," she replied.
"Ditto," thought John; "what does she mean by 'ditto'?" And, not wishing to display his ignorance before Mary, he thought he would ask his father. So, seeing him in the garden when he reached home, he said: "Father, what's the meaning of 'ditto'?"
"Oh! that's easy," said the old man. "You see this cabbage and that cabbage?"
"Yes."
"Well, that's 'ditto.'"
"Drat my Mary's head!" said John, "if she haven't been and called me 'Cabbages.'"

ELBOIRICAL PROGRESS IN BRIEF

The statue of Liberty in New York harbor is to have an electric torch of 100,000-c.p., the illumination heretofore having been derived from a 54,000-c.p. group of arc lights.

It is proposed, as the science of electricity has no name of its own, to call it "electrics." The pair of words, "electrics" and "electrician," would thus be in analogy with optics and optician, mechanics and mechanician, mathematics and mathematician, and many others.

An endoscope—which is a small electric light—was recently made use of at the San Francisco City and County Hospital for illuminating the thoracic cavity of a patient, in which an incision had been made. The action of the heart and lungs was rendered visible to the surgeons, so that the operation intended was successfully performed.

It was reported by the Associated Press recently that James Grant, of Chicago, was killed by electricity while holding a telephone receiver to his ear. Later reports show that the man did not receive any shock, and that his death, which occurred three days later, was the result of natural causes in his own system.

It is stated that a novel kind of submarine boat has been launched at Savona by an Italian engineer, Signor Abbatti. The boat is designed for fishing and recovering lost property. It is driven by an electric screw, and is capable of remaining under water, for six hours at a depth of 330 ft. A first trip is to be made shortly from Civita-Vecchia.

Some observations recently published demonstrate the frequent existence of electric earth currents sufficiently strong, in some instances, to operate telegraphic instruments. One instance was mentioned of a negative current with E. M. F. of about 13 volts, as shown on the volt-meter. In another instance a negative current of 15 volts has existed with little fluctuation for five years.

The experiments of Prof. Elihu Thomson on oil as an insulator seem to prove that with very high voltages and high periods the insulating qualities of oil are all that can be desired. It appears that momentary contacts are not sufficient to break down the insulation, but that if the alternating waves are kept on for periods from a few seconds to half a minute, the oil may break down at last. Under certain circumstances, it was found that potentials which perforated oil at a distance of 3/16ths of an inch, failed to do so at a distance of 1/32nd of an inch.

A merchant in Wilmington has hit upon a curious way of advertising. In his show window there is a glass case in which is a pivoted Crocker-Wheeler motor with a fan, and about two pounds of feathers. When the motor is in operation it revolves completely around a circle, throwing a strong current of air and causing the feathers to fly around in all directions. The crowd about the window is so great that it requires two policemen to keep them away, and as a natural result the dealer is growing rich from his sales of motors.

The buoys in Gedney's Channel, at the entrance to New York harbor, are supposed to be the only ones in the world lighted by electricity. They have now been in use since 1888, and mark a channel 1,000 feet wide and 6,000 feet long. Up to 1888 the channel was practically closed at night, but owing to the great increase in the size, number, and draught of ocean steamers frequenting the port, the Government determined to try this lane of lighted buoys. The channel has a depth of thirty feet at mean low water, and now vessels of the largest burthen can go and come at any hour of the day and night. The cases of the lamps have to be of thick glass protected by heavy bars and ribs of iron and brass. The filaments of the incandescent lamps are made extra thick to withstand shocks, and each lamp has three of the little carbon loops in it.

Mr. Hartridge, surgeon to the Westminster Ophthalmic Hospital, London, has been devoting himself to the examination of the various forms of artificial illuminations, and their effects on the eyes, and he has come to the conclusion that the electric incandescence light—which he carefully distinguishes from the powerful arc light—possesses advantages that no other illuminant can claim. Mr. Hartridge takes good and sufficient sunlight to be the standard of illumination best suited to our eyes, and shows by analysis that the incandescence electric light comes nearest to it,—combining moreover, the maximum of illumination with the minimum of heat, with no products of combustion. He says that in all cases the apartment lights should be shaded, either by having the glasses containing the light, cut or ground, or by covering them with some thin material.

It is shown by Professor Langley that our best sources of light are surpassed by nature in one very important respect; namely, the production of light accompanied by heat. Thus, of the energy supplied by gas and oil for lighting purposes, much more than ninety-nine per cent. is given out in heat—while even in the electric arc light ninety-nine per cent. is waste, and in the incandescence lamp ninety-five per cent. The insect world is much more economical; the most careful measurements made with the delicate bolometer fail to show any sensible heat in the light of the firefly; and it is argued that there is no reason why nature should not be successfully imitated in this respect. It is stated that Professor Hertz hopes to devise a method of obtaining better results than at present are produced by ordinary means, in getting electrical vibrations similar in every respect to those of light, but of greater wave length. By modifying his original apparatus, he had some prospect of producing waves so much shorter that all of them will be luminous—in other words, of developing a new source of light without heat,—a result which, if successful, will be an entirely new mode of illumination.

The Way to be Happy.

A hermit there was
Who lived in a grove,
And the way to be happy
They said he had got—
As I wanted to learn it
I went to his cell,
And this answer he gave,
As I asked him to tell.

'Tis being and doing
And saving that make
All the highest of pleasures
'That mortals partake—
To be what God teaches,
To do what is best,
And to have a good heart,
Is the way to be blest.