

### The Flowers and the Soul.

All through the lonely, dreary wint' days,  
Some fragrant plants ceased not to grow and bloom,  
Enlivened by a hearth-fire's steady blaze,  
Where ruddy coals delved the gilded gloom,  
Which outdoors did abound.  
Quite lustily they thrived, and seemed to steal,  
For increase, each pale sunbeam that down shone;  
Well were they cared for, and were made to feel  
The impress of that subtle charm which home  
So gently girds around.  
Until the joyous springtime came apace,  
Near its mystic echoes seemed to ring,  
And nature showed in bright and kindly face,  
So that the birds no longer feared to sing  
Upon the budding boughs.  
Then there arrived a very busy day:  
The close-grouped plants were parted, lifted forth  
And carried to a garden, far away,  
All greenly beautiful, which toward the north  
No prospect wide allows.  
Ah, much we missed the tender, leafy screen,  
The pretty blossoms 'gainst the window pane!  
Regretting then at first, we did not deem  
That only then departed had their reign,  
In very sooth, began.  
And here we see a likeness to the soul,  
Which dwells at best within a pleasant room,  
While bound to earth, yet ever lies its goal  
In Beulah's shining meads beyond the tomb,  
Where glows the Eternal Sun.  
—Boston Bulletin.

### Running Away From a Rival.

"'Tis a burning shame," mused Alf Singleton, discontentedly, "that amid so many fair and charming women one cannot be sure of finding a true, disinterested heart. The poor ones are generally given to fortune hunting, while even the heiresses seem none too high or proud to angle for a few extra thousands. If I could believe in the genuine goodness of any of them, it would be—but, pshaw!" he broke off, gloomily, "no doubt she is just as heartless as the rest, if one chose to test the matter."  
And the misanthropic young bachelor bit off the end of a fresh cigar half savagely, as, glancing in through the open window, he saw Esmeralda Rue smiling sweetly up into the face of an elderly gentleman whom he knew to be the possessor of a handsome fortune.  
"Just like the rest of her sex," he continued, moodily. "She would sell her youth and beauty only too willingly for that old curmudgeon's half million. And yet, with a tender, reflective look softening his features, 'it is only two evenings since that her face changed color and her eyes grew moist at my reading of 'Locksley Hall.' A man might have staked his life just then upon her being capable of sacrificing everything for love's sweet sake. And here she is, smiling like an angel upon old Moneybags! Bah! I feel like turning my back forever upon them all."  
But he didn't. After one or two more hesitating turns up and down the piazza he threw his cigar away, and, entering the ballroom, walked straight up to Esmeralda and asked her for a waltz.  
The young lady seemed much interested in her conversation with "Old Moneybags," as Alf had disrespectfully dubbed the wealthy Judge Ingram. Still, at Alf Singleton's approach, a flush of unmistakable pleasure rose to her fair cheek, and, excusing herself to her companion, she was soon gliding through the mazes of a perfect waltz to music that might have stirred the pulses of an anchorite.  
Alf was an exquisite dancer, and, as he passed the judge with his arm encircling Esmeralda's graceful form and his handsome head bent low in conversation with his lovely partner, he was quite sure he detected an expression of jealous envy upon the elder gentleman's face.  
"Aha!" he thought, with a thrill of ungenerous triumph; "he is probably thinking just now that money can't buy everything. Well, after all, youth and good looks are better than riches, and if Miss Esme has made up her mind to choose the latter, I will, at least, make her realize to the fullest extent the happiness that her choice will cost her."  
And he was as good as his word. Never before had he been so brilliant, so interesting, so attractive. Esme seemed so pleased and happy, too, in his society, and so charmingly appreciative of his efforts to win her regard, that he felt almost inclined to think he had misjudged her. For one brief, blissful interval life began to look all colour-de-rose to poor doubt-tortured Alf until in an evil moment he introduced the subject of the lady's wealthy admirer.  
"He is the most charming old gentleman in the world," declared Esmeralda, with the prettiest blush imaginable.  
"Indeed, Miss Esme, the judge is fortunate in having such a lovely champion," said Alf, a half-smile but

partially concealed in his light laugh. "I wonder if it is to his own charms, or those of his half-million, that he owes the happiness of your—love?"  
He had not meant to say that last word, but since he had spoken it he breathlessly watched for its effect. If she had no ambition as he had ascribed to her, this was surely a splendid opportunity to disclaim it.  
"Mr. Singleton," she exclaimed, impetuously, a flash of real anger in her blue gray eyes, "such a question does no honor either to your head or heart. Judge Ingram is a noble man, and I should think of him just the same if he had not a dollar in the world."  
Alf's heart sank, and, as the waltz was ended, he led her to a seat, and soon found himself once more pacing the moonlit piazza in bitter restlessness of spirit. He did not believe that Esme loved the judge, despite the evident feeling which she had displayed. No fair young girl like that could love a man old enough to be her father. He still believed that she meant to wed him for his wealth, but that her pride impelled her to make the world think otherwise.  
Well, he loved her, he reflected, with a sad, half-mocking smile; yes, he loved her, this fair, sweet girl who had seemed so very near his highest ideal of womanhood. But he would never lay his heart at her dainty feet to be cast aside for another man's gold. Yet he could not stay to be tortured by the sight of a rival's happiness. No; before Esmeralda opened her lovely eyes upon a new day of triumph he would be far away from that miserable watering-place!

The sun was setting upon a beautiful mountain landscape in the far West. Alf Singleton was combining business with pleasure, and, while business led him to the pretty Western town whose modest houses were scattered picturesquely about on the level plain at the foot of the mountains, he was tempted by its beauties to remain and explore the many points of interest in the vicinity.  
But it was not until, in turning the leaves of the hotel register, his eyes fell upon the name of Judge Ingram that he bethought him of the fact that Esme's home was in the West—perhaps in that very town, for aught he knew. He remembered that she had sometimes spoken of her Western home, though she had never named the particular spot thus favored. That Judge Ingram should cross his path again in this faraway locality, aroused all the old-time love and jealousy which he had thought buried long ago.

"Judge Ingram is here, I see," he said, speaking with affected carelessness to the clerk. "I had a slight acquaintance with him in the East. Quite wealthy, is he not?"  
"Yes, sir," replied the clerk, politely, "but he is not here at present. He is visiting his wife's relatives just now, I believe, and you could probably find him there. It is but a stone's throw from the hotel."  
"His wife's relatives?" echoed Alf. "And they are—?"  
"Colonel Rue's family—old and honored residents of this city. Why, sir, didn't you know—?"  
"No," said Alf, briefly; "the judge was not married when I knew him."

And, thanking his informant, he turned on his heel and left the hotel, as the clerk supposed, to seek the judge, but in reality to hide the agitation which this sudden confirmation of his fears caused him.  
Poor Alf! It was hard work choking back the big lump that would stick in his throat at the bare thought of Esme Rue being another man's wife. To think that he had fled from the mere possibility of his rival's triumphant happiness at that Eastern watering-place only to confront the bitter fact in this far away Western town!

His heart was swelling with indignant sorrow as he turned to climb a hillside whose uneven paths and jutting boulders offered a chance for action and something of an escape-valve to his excited feelings. Turning a sharp curve in the path, it seemed only natural and a part of his luckless fate that he should suddenly come almost face to face with the two who were uppermost in his thoughts.  
They were seated upon the flat surface of a large projecting rock, as if resting after a long ramble over the mountain. Esme was busying herself with pressing some freshly-gathered wild flowers between the leaves of a book she held, while the judge alternately watched her at her fascinating task, and looked away over the grand and picturesque landscape with an expression of serene and perfect happiness on his noble old countenance exasperating to behold.

Alf had just time to grind his teeth together savagely ere Esme glanced up from her flowers, and for a full half minute they looked straight into each other's eyes. He noted the warm color slowly rising in the clear, fair cheek of the woman he had loved and lost, until a deep, rich crimson dyed the lovely face from forehead to chin. Then he raised his hat, with a slight smile of triumph, and turning abruptly on his heel vanished from Esme's sight before the judge had even withdrawn his contented, admiring gaze from the magnificent panorama spread out before them.

Esmeralda did not mention her momentary vision of her old lover, but the carnation roses glowed in her cheek long afterward, and dreams which she thought dead and almost buried out of sight came to light again with startling vividness, and she knew that she had never ceased to love Alf Singleton, and never should until her dying day.  
What did that strange expression in his eyes mean when he looked at her just now? There was the same look which she had once thought was love in those delightful days when they wandered together by the summer sea; and the same half-mocking light which had so often marred the manly beauty of his countenance, only both were now intensified. Yet if he had loved her then, why had he gone off so suddenly without a word of explanation or farewell?  
But while Esme was thus puzzling her brain over a problem which had often troubled her, the judge was happily unconscious that anything had occurred to disturb his fair companion's tranquillity. Therefore, when he almost ran over my hero that same evening in turning a street corner, he was honestly glad to see him, and almost overwhelmed poor Alf with the heartiness of his greeting.  
What torture there is imposed upon man by the requirements of civility comparable to that which forces him to congratulate a successful rival upon the winning of that which was the object of his own dearest hopes? This was the ordeal poor Alf had to go through, and his manner was very cold and constrained as he did so.  
"Yes, my boy," said the judge, beaming like sunshine upon his wretched listener, "I am a happy man. My wife is one of the loveliest of women, and belongs to one of the finest old families in this place—the Ruess. But I believe you know them."  
"I had the honor of Miss Esme's acquaintance last summer at Cape May," said Alf, trying to speak naturally.

"Ah, yes, young dog," said the judge, shaking his curly old head at Alf with his brightest smile. "I once thought there was a very promising love affair going on in that quarter, but I was an old fool just then—in love myself, and fancying that everybody else was. But come round to the colonel's and we'll talk over old times, Singleton. Esme will be delighted to meet you again, I'm sure." And the judge moved off, scattering smiles of sunshine as he went.  
"He hit the mark that time," thought Alf, as he walked back to his hotel, moodily resolving to leave the town by that evening's train. "There is no fool like an old fool. He fondly believes that Esme Rue married him for love, while I know that it was only for his money. If he had seen the way she blushed to-day at the mere sight of her old lover he would hardly have invited me around to talk over old times with his wife. An old fool, indeed, I pity him, with all his wealth. But I'm not quite villain enough to accept his invitation. No, I'll pack my valise once more, and see if I can find a spot where I shall not be tormented by the sight of that old simpleton's happiness."

Alf kept his word, and two hours later, valise in hand, was walking firmly toward the depot whence the coming train would soon bear him from Esmeralda's too fascinating neighborhood.  
It was not strictly necessary that he should pass her home on his way to the depot, but that was one temptation which he found it impossible to resist. In his heart he longed to cross that shrubbery-dotted yard and vine-wreathed portico; to enter that white cottage and clasp for one moment the dear white hand of the heartless woman he had loved; to gaze down into the depths of those blue gray eyes until he brought the conscious blush to her cheek, that blush which told him that he alone reigned king of her heart, wife though she was.  
Some men would have done so; but Alf contented himself with walking past very slowly, gazing at the open windows so intently that, in the growing dusk, he almost brushed against some one leaning over the low white gate before he knew where he was. One swift glance and then they clasped hands over the gate as by a common irresistible impulse. Esme was blushing deeply—he could see that

even in the dusk—but as for poor Alf, he was very white and his breath came quickly.  
"Esme!" he exclaimed. Then, remembering, he added: "I beg your pardon, Mrs. Ingram. Let me congratulate you."  
"Mrs. Ingram!" echoed Esmeralda. "What do mean, Mr. Singleton?"  
"I mean to congratulate you upon your brilliant marriage," said Alf, somewhat bitterly. "I met your husband, the judge, an hour or two since and he invited me to call and see you. However—"  
"My husband—the judge?" repeated Esme, looking as if she thought him beneath of his senses. "What do you mean, Mr. Singleton?"  
"Are you not Judge Ingram's wife?" he asked, hoarsely.  
"Indeed I am not," she answered, a mischievous look beginning to dawn in her eyes.  
"Then, who the deuce is his wife? He told me he had married into Colonel Rue's family, and asked me to call, saying 'Esme' would be pleased to see me. And I saw you together to-day. Now, what does it all mean?"  
"It means," said Esmeralda, laughing now, "that Judge Ingram married my father's youngest sister, and, being here now, is stopping at our house. And I assure you, Mr. Singleton, he is the most charming uncle in this world."

Alf looked bewildered, crestfallen and happy all at once.  
"Tell me one thing, Esme," he pleaded. "Was he your uncle when you told me you loved him that night as we were waiting at Cape May?"  
"No," she said, smiling; "but I knew he soon would be, and I had a perfect right to love him even then."  
"Oh, Esme, why did you not give me an explanation then?"  
"Because you did not ask for one."  
"No" (very much ashamed of himself). "A young fool is worse than an old one after all. But, Esme, I loved you so, and I believed you were going to marry the judge for his money, and I could not stay to see it. You don't know how miserable I have been."

"Was that why you left us without a word, you foolish boy?"  
"Indeed it was!"  
Alf dropped his valise to the ground, for Esme's crimson face was hidden on the rounded arms, crossed over the low, square gate-post, and he was very anxious to lift it from its hiding-place and see the love-light shining in those bewitching blue-gray eyes. And thus we leave them to talk over the old, old story in the deepening twilight of the that far-off Western town.

### SCIENTIFIC SCRAPS.

Grapes exposed to sunlight contain three and three-fourths per cent. less acid than those which have remained in darkness.  
According to G. Forbes the velocity of blue light is greater than that of red, the difference being between one and two per cent. of the whole velocity.  
Dr. Andries and M. Faye both agree that cyclones, tornadoes and trombes are one and the same mechanical phenomenon and that their powerful action is due to the force in upper currents.  
In Europe electric railways are growing rapidly in public estimation, not only on the continent but in Great Britain. Already 100 miles of electric transit are in operation, and there is every probability of the total mileage being considerably increased before the end of the present year.  
The British were not the first to bring balloons with them to Egypt for purposes of war. They were certainly taken out by the French army in 1794. Bonaparte was unable to use them, however, as the apparatus for the preparation of the hydrogen gas was destroyed when Nelson annihilated the French fleet at Aboukir. These balloons were very small, having a capacity of only 530 cubic meters. They were made of silk, and were inflated with hydrogen made by causing steam to act on iron filings.

The coal required in London for lighting purposes and motive power Sir Henry Bessemer would have burned at the mines from which it is procured. The coal's energy might then be transmitted to the metropolis over a copper wire in the form of electricity, at a vast saving of expense. He estimates that 84,000-horse power, requiring an annual consumption of over a million tons of coal, might in this way be conveyed to London over a single-copper wire one inch in diameter. An important advantage of the plan, in addition to the saving in cost, is that the combustion of so large an amount of coal at a distance instead of in the city limits would considerably reduce the quantity of smoke in the London atmosphere.

### Manufacture of Jewsharps.

An Englishman has just established a manufactory of jewsharps in Troy. It is said that there are only two others in the country—one in New York and the other in Boston. A simpler instrument than the jewsharp it would be hard to conceive, but the process of manufacture comprises no fewer than thirty separate operations. The inventor of that humble instrument which has been vibrating all over the world for centuries, is unknown to fame. At the beginning of the present century the jewsharp was developed by combining several different instruments, each with a separate pitch, and in 1827 Eulenstein, a native of Wurtemberg, made a sensation in London by playing upon sixteen at once.

### Oriental Traffic and Wealth.

How many German and Italian cities owed to this tollsome Oriental traffic their wealth and magnificence? Professor Thorold Rogers brings this out clearly in his most interesting book on the "History of Agriculture and Prices in England." He says: "In the fifteenth century such towns as Nuremberg and Ratisbon, Mayence and Cologne, were at the height of their opulence. The water-way of the Rhine bears ineffaceable traces of the wealth which was carried down it in the numerous castles of the robber barons, the extirpation of whom became the first object to which the resources of civilization were directed. The trade of the East enriched burghers of the Low Countries till, after a long and tedious transit, the abundant spices of the East, increased in price a hundred-fold by the tolls which rapacity exacted and the profits which merchants imposed, were sold in small parcels by the grocer or apothecary, or purchased in larger quantities by wealthy consumers, at the great fair of Stourbridge or in the perpetual market of London" (vol. iv, p. 654.) Then came a memorable revolution. Western Asia was repeatedly ravished by the Turkish and Tartar hordes. In many rich, fertile and famous countries the cultivated lands returned to their primitive desolation, great cities shrank into miserable country towns, and the people sank into an incurable and hopeless lethargy. The Christian merchant found it more and more dangerous, less and less profitable, to penetrate into the interior of Asia. At length the Turkish conquerors reached the Bosphorus and the Hellespont. The Greek emperors gave place to the Ottoman sultans, and under their new masters the Euxine and Asia Minor were closed to Christian commerce. From Constantinople the Ottomans spread their conquests to the Danube on the one side and the Euphrates on the other. Finally Selam I. subdued Mesopotamia, the holy cities of Arabia and Egypt, and stopped the last overland route a few years after Vasco de Gama had discovered the passage round the Cape of Good Hope. Professor Thorold Rogers has shown with great fullness how Selim's conquest of Egypt raised the price of almost every Oriental commodity imported into Europe. The same conquest struck a fatal blow at the greatness of many an Italian and German city. From this epoch we may date the decline of Venice, and Venice scarcely suffered more than Ratisbon, Augsburg and Nuremberg. There, for generations, many an untenanted palace, many a silent street, reminded the traveler of that great change in the line of Eastern commerce. Then Portugal first, and afterward England and Holland, seized on the sea route to India and on the traffic of the East. England, who added to that rich monopoly the empire of India and of the seas, was to Europe all that Venice and Genoa, Augsburg and Nuremberg had been; and she was much more. But the decline of the Ottoman empire, followed by the construction of the Suez canal and of the Alpine tunnels, has reopened the old path of commerce. The cities of the Mediterranean are reviving. The Mediterranean states have gained much and we have lost something, even in the last two years, and as time goes on they will continue to gain and we to lose. Any one who visited, as I did, the cities of Southern Europe forty years ago, then cities of the dead, would hardly recognize them now—all bustle, activity and progress. But we must not forget that political freedom has had as much effect as the return of Eastern commerce in the renewal of their prosperity. The English merchant is not so selfish as to complain of a change which has benefited the producers and consumers of the world. Instead of sitting down with his hands before him, bemoaning his hard fate or living upon a reduced trade, he has found out new trades, if not so profitable to individuals, even more beneficial to mankind than those which he has lost.—Fortnightly Review.

### CLIPPINGS FOR THE CURIOUS.

A German has invented a gunpowder that water won't hurt.  
To every 400-pound bale of cotton there are 1,200 pounds of seed.  
Young salmon increase in weight from three to seven pounds in four weeks' time.  
The length of the submarine cables in the whole world is estimated to be 64,000 miles and their value to be \$202,000,000. The length of all the wires in the world would reach forty-eight times around the earth.  
According to the report of the commissioner of agriculture of 1870, the larvae of a large fly which frequents Mono lake, in California, are dried and pulverized and mixed with acorn meal and baked for bread, or with water and boiled for soup.  
A fisherman caught recently in his net at Queen's Ferry, a few miles below Chester, England, the largest salmon ever caught in the Dee. It was found to weigh the scale at forty pounds, was four feet in length, and a healthy, clean and well-developed fish.  
The use of face masks of mica, for the protection of metal and glass melters, stone masons and other workmen exposed to heat, dust and noxious vapors, is found to be quite serviceable. These masks allow the eyes to be turned in any direction and admit of the wearing of glasses.  
Iceland was visited by a remarkable sand storm last spring, which lasted for two weeks, and during which the temperature was intensely cold. The air was filled with dry, fine sand to such an extent that it was impossible to see more than a short distance, and the sun was rarely visible.  
Glass-spinning and glass-flower manufacture is a very extensive branch of the Austrian glass industry. It is now so developed that a petroleum flame gives some 1,540 yards of glass thread every minute, that are woven not only for glass cloths, etc., but also for watch chains, brushes, etc.  
When the army of Suvarov retreated from Elm in 1799 the march of the men loosened the snow of the Alps so that avalanches descended upon them and 300 mule drivers and their animals were buried under one of these immense snow slides. Only 17,000 of the 20,000 who left Elm made the march in safety.  
The balloon Reliance made a singular flight from the Alexandria palace, London, recently. It rose gradually to a height of 1,500 feet, drifting in a northerly direction, then, when ballast had been thrown out, rose 1,500 feet more. At that a current carried it toward London, and through a thick mist it descended at the end of an hour upon the very place from which it had risen.

### The Largest Telescope.

The largest telescope in use is the great reflector of the Earl of Rosse, at Parsonstown, Ireland. The instrument weighs twelve tons. The speculum is six feet in diameter, and has a focal length of about fifty-five feet. The largest and most effective refractor telescope in the world now in actual use is the one in the Naval observatory in Washington, constructed by Alvin Clark & Sons, Cambridge, Mass. This is the instrument which has been rendered famous by the discovery of the two moons of Mars. An instrument of one-inch greater aperture has just been mounted in the Imperial observatory at Vienna, the one at Washington having an aperture of twenty-six inches and that at Vienna twenty-seven. Two still greater refractor telescopes have been ordered, one for the imperial observatory at Pultowa, Russia, with a glass of thirty inches diameter and focal length of forty-five feet, and another, of equal or greater dimensions, to be mounted in the Lick observatory on Mount Hamilton, near San Francisco. Galileo is regarded as the inventor of the telescope, although before he exhibited his instrument at Padua, Italy, in 1609, Hans Lippershux, of Holland, had invented the convex object glass, and Galileo is said to have got his idea from hearing of discoveries made by Metius, a Hollander, through a combination of lenses.

### The Cost of the Fences.

It has been estimated by Bradstreet's that there are six million miles of fence in the United States, the cost of which has been more than \$2,000,000,000, or about \$625 a mile. Formerly the fences of farms were built of wood, and the annual repairs put a heavy tax upon the farmers. The last census shows that the cost of such repairs in 1877 was \$78,629,000. Most farm fences are now built of wire, and sixty thousand miles of such fence were built in 1881, at a cost of \$10,000,000, or about half the cost per mile of the old wooden fences.