SHADOW OF THE WORKINGMAN.

Behold the swiftly flying boat!
In conscious might it steams along;
With graceful lines and powerful frame,
It proudly bears its living throng.
To distant lands it ploughs its way,
And to the many wealth doth bring
Its tidings from the absent friends;
Are welcome as the smiling spring.
You see it cleave the restless wave,
And know old ocean's space 't will span
But, cast o'er all, can you behold
The shadow of the workingman?

See, on the locomotive rush
With headlong speed o'er iron road,
Like living, breathing monster, whom
Some unseen powers onward goad,
Through cities, towns, and shady dells,
O'er gurgling streams and woodland glades
It speeds you on with clang and roar;
Ay, 'neath the mountains' gloomy shades
With ease it quickly bears along
Pilgrims of every tribe and clan;
But o'er each fleeting view dost see
The shadow of the workingman?

Come, gaze upon this mighty pile,
The spire of which in cloudland dwells;
Kissed by the setting sun's last ray,
As gently chime the distant bells;
Come view its grandly massive walls,
Its pillars, halls, and arches true,
Which are so neatly, deftly wrought
Without one flaw to meet the view.
O'er all this blended strength and grace,
As round it zephyrs gently fan,
Can you not see, in outline bold,
The shadow of the workingman?

Go seek the lofty mountain height,
And there behold the glowing scene—
The forest, field, and waving grain,
The rippling lakes, the meadows green;
Each beauty of the prospect view,
All thronged with useful, busy life,
Where once the gloomy wilds were seen,
Where savage revels once were rife.
Go, look upon all earth's broad face,
Replete with art and nature's plan;
And there, in bold relief, you'll see
The shadow of the workingman.

Lady Delight.

A golden haired little girl in a purple dress—you would not understand perhaps when you heard them call her Lady Delight, until you observed her graceful, exquisitely modest manner, and heard the fine enunciation of her speech. Hardly the place you would look for either—a tumble down hut, half fisherman's home, half farm-house, on the flats of Jersey. It was but a brown dot upon the wide yellow sands, where the blue sea turned a line of white surf for miles in a line upon the bare salt shore, and yet there were other brown dots, with now and then a more pretentious house, all the way to the town over the hill in the hollow—Belletown, a rather gay seaside resort. At least it had a pretty good hotel, and summer boarders from the neighboring cities. The hotel was the Larch house, where Lady Delight's father, Skipper Doyle, sold his fish frequently; but his daughter never came thither, and could not have learned her nice speech and the gentle manners of the city people. Her neighbors remarked this, and observed that she was "like her mother," who was intelligent and refined. The present Mrs. Doyle was not intelligent and refined.

She was energetic and unrepressed—or, as the neighbors said, "driving and scolding," and perhaps it is not to be wondered at when I add that the good woman had seven sons and honestly endeavored to do her duty by them. They were not like Delight but they were her brothers, and she loved them all, from the three-year-old twins to Dan who was fifteen and old enough to raise the potatoes and catch the fish when his father was ill—as occasionally happened. The family's only other sources of income were derived from prodigious labors of Mrs. Doyle, who raised chickens, cultivated asparagus, made butter and sewed straw. It was strange that in none of these underakings Delight had ever been allowed to share much. Mrs. Doyle, though the mother of many children, had no taste for the care of them.

"I can't putter around all day with the children, Delight. You have a knack at getting along with them. Just keep them from under my feet to day, for I've got to get the eggs and asparagus to market, wash, churn and finish off a dozen of them straw hats."

So Delight, winning, persuasive, kept the four smallest boys under her rule, while she ran with them up and down the yellow sands in the bland summer weather. When she was sixteen, taller and a little more sedate, she often chanced to meet Rick Revere, who strolled with them, or took them out in his boat. The Reveres were more prosperous than the Doyles; they had more fishing-boats, a larger farm; and then Grandame Revere was Delight's godmother. It was she who gave Delight her pretty purple dresses—in the autumn a fine merinos in the spring an organdie; taught her to sew exquisitely, and encouraged her taste for flowers. She was a splendid old lady, portly and brave in snowy caps; and Rick had her blue eyes and handsome presence. Skipper Doyle's family always liked him; but after Lady Delight was sixteen, his firm tread was often heard on the bare floors, his ringing laugh under the low roof. He walked on the shore with her sometimes when the children were not with her; or the two rowed away toward the sunset and parted lingeringly in the moonlight.

"You'll be taking Delight away from us some day," Mrs. Doyle remarked, fixing her black eyes on him sharply.

"I hope so," he replied, fearlessly; and she was fain to turn away, half fretted, half flattered.

"What shall I do with the children when Delight marries?—Tom, and Ned, and Ben, and Will, and—the—baby!" for soon there were eight sons under the roof-tree.

But, come what might, Lady Delight never fretted nor frowned. She embroidered the baby's flannels, swung it to sleep in a hammock made of a fishing-net, played with the twins, taught the others to spell, sewed for the whole family. Only she must have her evening stroll with Rick.

"Bunny'll sleep, mother. I've had him out in the fresh air all the afternoon. And I'll finish the little jacket for Ben in the morning!" and the sunset would gleam across the golden head and purple dress as Lady Delight flitted away to meet her lover.

"It's plain enough to be seen the way things are going; and I'll have my sister Roxy come and live with me," murmured Mrs. Doyle. "I'm not going to be left in the lurch this way."

So Roxy Reed came from her own crowded father's family to make one of Skipper Doyle's. She had curly black hair, she was plump, she was coquettish. Mrs. Doyle plumed herself on her young relative's graces. As for Miss Roxy, she set her cap instantly at Rick.

"He's engaged to Delight," said Mrs. Doyle, in a low tone.

"I don't care," answered Roxy. "He's the only good-looking fellow around here, and I'll get him if I can."

Delight overheard this conversation; but Rick did not. He did not recognize Roxy Reed as bold and unscrupulous; the red cheeks and dimpled shoulders and veil of curls cast a glamour over his eyes. And at first it was only offering civility to one of the family when he took Roxy out in his little white boat, the Petrel, which was large enough to hold but two. But the girl was full of animal spirits and buoyant life, which was exceedingly attractive; it was plain that Rick was soon fascinated.

"She is full of fun, and witty—capital company. I don't see why you don't like her," he said to Delight.

"I did not say that I did not like her," answered Lady Delight, with gentle surprise.

"No, but you never seem to care for her society. You hardly spoke a word all last evening; just rocked that dreadful baby—"

"The baby isn't well," interrupted Delight, "and mother is worn out with toothache."

Privately, she thought Roxy might have taken care of the child, under the circumstances.

"Oh! I beg your pardon, but you know I'm not partial to babies. At least I prefer them asleep, looking like slumbering angels. By George! but it's fun enough just to *hear* Roxy laugh."

This speech hurt little Lady Delight. It did not sound like Rick, who she knew was fond of children, and who had always been tender and considerate. But she only said: "Yes, she had noticed Roxy's hearty laugh," and "No, she could not go out in the 'Petrel' to-night, and certainly he might take Roxy."

Soon, so soon, there was an end of the sunset walks and moonlight rows. Rick and Delight drifted apart, and she never lifted a finger to detain him. "I never knew why he loved me," she said to herself, "and now I do not know why he leaves me."

She was always outwardly calm and gentle, though sometimes, at sight of Rick and Roxy together, she would tremble like a leaf. They had come to avoid each other—to look no more into each other's faces; it was far less pain to Lady Delight at least, to be apart than to be near. And Rick—Rick knew he was wrong. I can only say in his excuse, that he was not the first man bewitched by a wily and handsome girl from allegiance to his true love. He seldom came to the house, but Roxy met him on the shore, by Brant Rock, where the little Petrel was moored. If Mrs. Doyle found her sister of less assistance than she expected, she made no complaint.

"Let him take Roxy, if he's such a fool as not to know that Delight is worth two of her. I shall be suited," with a pursing of the coarse lips and a grimace of the narrow forehead.

All the little world about Lady Delight could see how matters ran. The brothers, who seemed too rough or too young to understand, were very kind to her. The little boys hunted all day for great bunches of wild flowers, with which they burdened her, for the sweetness of everything seemed gone to poor Lady Delight. Ben, next older, who hated to work in the garden, faithfully hoed her pinks and tied up her vines. And Dan openly resented Roxy's interference in his sister's affairs.

"Mighty takin', she thinks *she* is, with her hair kinked up, an' her tongue always a-waggin'! Handsome! She ain't no more handsome than a horned pout," and Dan spoke sincerely; in his prejudiced eyes Roxy was of no ways attractive.

"She won't never cut me no bread an' butter an' if she slaps Bunny again when mother ain't lookin', I'll tear her old ruffled gown!" put in Tom, one of the twins, and Lady Delight was too weary to reprove the child for bad manners. She only smiled a faint response as Dan's brown hand stroked her golden hair, and Tom hung around her waist heavy and loving.

But one night Roxy went down to the boat mooring, and flounced back bout 8 o'clock evidently out of sorts. It transpired the next morning that Rick Revere had not met her, for word chanced to come that he was sick.

"They do say it's small-pox, but may be it ain't," said the boatman, who lounged in the doorway and chatted with Skipper Doyle.

But it was that dreadful disease, which Rick Revere had somehow in his intercourse with seafaring men contracted. The town authorities interfered and obliged him to be removed from his home to a little stone house, far remote from any other habitation, which stood far down the shore, whither his proud, adoring old grandmother went to attend him. She had had the disease in her youth, and she would not have Rick left to strangers.

"The small-pox!" shrieked Roxy, "It's catching! And he was holding my hand and I was sitting on his knee only night before last. If I haven't taken it, I hope I never shall set eyes on him again, that's all!"

"Well, you ain't one of the faithful kind such as we read about, be ye?" remarked Skipper Doyle, dryly.

"I wouldn't have my complexion spoiled by small-pox for all the fellows in Christendom!" returned Roxy, tartly.

"Well you'd better be a little useful as well as ornamental, since Delight has walked herself off her feet with that teething baby!" responded the skipper, who made no secret of not liking his wife's young relative.

For Lady Delight was lying prostrate in her little white chamber above. The last fierce excitement had utterly sapped her waning strength. It was not the teething baby, it was an aching heart which had so worn on her. She was weeping now, in a silent, breathless way, among her pillows.

"Lonely, suffering—and he will die and never know that I loved him better than she!"

And now her labors redoubled by Delight's illness, and dissatisfied with Roxy, since affairs had not turned out as she wished, Mrs. Doyle fell out with her sister.

"You've just played the mischief, an' done no good at all since you've been here, Roxy Reed. You'd better just pack up an' go home!"

"I will that!" pouted Roxy, and forthwith was as good as her word.

Roxy was soon gone, but for three long weeks Rick Revere lay terribly ill in the little stone house far away.

Secretly, for Lady Delight's sake, Skipper Doyle exerted himself to obtain daily news of the sick man. Only his old grandmother's intelligence and faithful care saved his life and prevented serious disfiguration. They heard, at last, that the red flag had been taken down from the door of the stone cottage. Rick was better—had recovered, and come home.

Lady Delight, a very pale and gentle lady, indeed, had come down from her tiny white chamber, and was going quietly about the house. The family had greatly missed her finishing touches of taste and neatness in the little home.

She had filled the windows with boxes of plants from her winter-threatened little garden, and was sitting by the fire, mending her mittens, when, looking up, she saw Rick Revere coming into the dooryard. He was bending before the cold wind.

She ran to the door.

"Oh, why did you come out so soon —in this weather? You will take cold and die!" she cried.

"I had better, I think, don't you?" asked Rick, taking her hand and looking into her eyes.

Lady Delight remembered.

"Roxy has gone away," she said.

"I did not come to see Roxy. I don't care to see her again, ever! Oh, my little Lady Delight, in the long nights so near my death, I learned that I did not care for her a jot. I loved nobody but you. In those dark weeks I have wept like a home-sick child for a sight of your purple dress and golden head. But I know how I have treated you. Can you take me back?"

"I hoped you would come," said Lady Delight, simply. "So I have just stayed."

Two views of the matter: An Irishman tried to shoot a little chipping bird with an old Queen Anne musket. He fired. The bird, with a chirrup or two, flew away unconcerned in the foreground, and Pat was swiftly and noiselessly laid on his spine in the background. Picking himself up and shaking his fist at the bird, he exclaimed, "Be jabers, ye wouldn't a chirruped if ye'd been at this end of the gun!"

How to Develop a Boy's Brains.

An incident in the school-life of a teacher, as related by herself, illustrates our point. She had charge of a school in a country town early in her career, and among her scholars was a boy about fourteen years old, who cared very little about study and showed no interest apparently in anything connected with the school. Day after day he failed in his lessons, and detentions after school hours and notes to his widowed mother had no effect. One day the teacher had sent him to his seat, after a vain effort to get from him a correct answer to questions in grammar, and, feeling somewhat nettled, she watched his conduct. Having taken his seat, he pushed the book impatiently aside, and espying a fly, caught it with a dexterous sweep of the hand and then betook himself to a close inspection of the insect. For fifteen minutes or more the boy was thus occupied, heedless of surroundings, and the expression of his face told that it was more than idle curiosity that possessed his mind.

A thought struck her, which she put into practice at the first opportunity that day. "Boys," said she, "what can you tell me about flies?" and calling several of the brightest by name, she asked them if they could tell her something of a fly's constitution and habits. They had very little to say about the insect. They often caught one, but only for sport, and did not think it worth while to study so common an insect. Finally she asked the dunce, who had silently, but with kindling eyes, listened to what his schoolmates hesitatingly said. He burst out with a description of the head, eyes, wings and feet of the little creature, so full and enthusiastic that the teacher was astonished and the whole school struck with wonder. He told how it walked and how it ate, and many things which were entirely new to his teacher. So that when he had finished she said: "Thank you! You have given us a real lecture in natural history, and you have learned it all yourself."

After the school closed that afternoon she had a long talk with the boy, and found that he was fond of going into the woods and meadows and collecting insects and watching birds, but that his mother thought he was wasting his time. The teacher, however, wisely encouraged him in this pursuit, and asked him to bring beetles and butterflies and caterpillars to school, and tell what he knew about them. The boy was delighted by this unexpected turn of affairs, and in a few days the listless dunce was the marked boy of that school. Books on natural history were procured for him and a world of wonders opened to his appreciative eyes. He read and studied and examined; he soon understood the necessity of knowing something of mathematics, geography and grammar for the successful carrying on of his favorite study, and he made rapid progress in his classes. In short, twenty years later he was eminent as a naturalist, and owed his success, as he never hesitated to acknowledge, to that discerning teacher.

Steam on the Atlantic.

In the concluding article of his series of papers entitled "Notes for a History of Steam Navigation," in the *United Service Magazine* for December, Rear-Admiral George H. Preble, United States Navy, gives a valuable compilation of statistics concerning the loss of life and property in steam vessels on the Atlantic Ocean. The period covered begins with the first trip of the steamship *Sirius*, in 1838, and ends with the close of 1879—forty years. The tables were compiled from records in the archives of the Atlantic Mutual Insurance Company of New York, and are as full as it is possible to make them, some of the earlier disasters having passed almost out of mind, leaving no data behind from which to judge of the loss of life. The whole number of vessels lost in these 40 years was 144, or an average of between 3 and 4 vessels a year. Of the number of lives lost even an approximate estimate cannot be made, for many of the vessels lost were never heard of after leaving port, and the numbers of their passengers and crews cannot be ascertained. The first steam vessel lost on the Atlantic was the *President*, a wooden ship of 2366 tons, sailing under the British flag. She disappeared mysteriously, as many vessels have done since, and nothing was ever heard of either the ship or her passengers. This was in 1841, and from that time until 1854, 13 years, only one life was lost by the wreck of an Atlantic steam vessel. In 1854, however, a second vessel mysteriously disappeared, and her 450 passengers and seamen were all lost.

This was the *City of Glasgow*, another wooden vessel of 1609 tons. This was a disastrous year for transatlantic navigation, for it was in 1854 that the *Arctic* was sunk, 40 miles off Cape Race, carrying down 562 persons. The *Arctic* belonged to the Collins Line, and was an immense wooden vessel for those days, being rated at 3000 tons. She was sunk by a collision with another steam-ship, the *Vesta*. From 1854 to 1860 there were enough great losses to make people timid about venturing their lives or their property on the ocean. In August, 1854, the British wooden steam-ship *Her Majesty*, from England for Quebec, disappeared, and all on board were lost. The *Pacific*, of the Collins Line, disappeared in 1856 with 200 souls, and *Le Lyonnais*, a French ship, was sunk by a collision in the same year, and 260 were lost. The *Tempest* disappeared in 1857, and all were lost; in 1858 the German ship *Austria* was burned, and 533 lives were lost, and in 1860 the British ship *Hungarian* was wrecked off Cape Sable, and 205 lives were lost.

After 1860, however, there are comparatively few entries of "all lost," and many more of "all saved." The great disasters of the 40 years in which large numbers of lives were lost (omitting those given as "all lost") were the loss of the *City of Glasgow*, just mentioned, with 450 lives; the *Arctic*, with 562 lives; the *Pacific*, *Le Lyonnais*, and the *Austria*, with 200, 260 and 533 respectively; the *Hungarian*, of the Allan Line, from Liverpool for Boston, in 1860, with 205 lives; the *Canadian*, also of the Allan Line, in 1861, with 30 lives; the *Anglo-Saxon* of the same line, in 1863, with 237 lives; the *Cambria*, of the Anchor Line, wrecked in 1870, losing 196 lives; the *Scanderia*, of the Morgan Line, which disappeared in 1872, with 45 souls; the *Atlantic*, of the White Star Line, which was wrecked in 1873, and 549 lives lost; the *Ville du Havre*, in the same year, with 230 lives; the *Schiller*, of the Eagle Line, wrecked in 1875, losing 200 lives; the *Deutschland*, of the North German Lloyds, in 1875, with 157 lives, and the *Pomerania*, of the Hamburg American Packet Company, in 1878, with 50 lives. Nineteen vessels in the 40 years have lost every soul on board.

These were the *President*, in 1841; *Her Majesty*, 1854; the *Tempest*, 1854; the *Rechid*, 1861; the *United Kingdom* 1869; the *City of Boston*, 1870; the *Commander*, 1872; the *Mary Church*, 1872; the *Shannon*, 1872; the *Charruca*, 1872; the *Devon*, 1872; the *Ismalia*, 1873; the *Anna*, 1874; the *Colombo*, 1876; the *Mexican*, 1877; the *Copia*, 1878; the *Herman Ludwig*, 1878; the *Homer*, 1878; and the *Zanzibar*, 1879. The first 13 of these, down to the loss of the *Colombo*, of the Wilson Line, in 1776, are unclassified as to ownership and did not belong to any established line.

Of the 144 vessels lost, more than half were wrecked, most of the wrecks being close along the shore; 24 are classified as missing, which means that they never reached the ports for which they sailed; 10 were burned (and in cases of fire all the passengers were invariably saved, with the notable exceptions of the *Austria* in 1858, when life-saving appliances were by no means up to the present standard, and the *Sardinian*, in 1878, which was caused by an explosion); 8 were sunk by collisions and stress of weather, and only 3 are reported sunk on ice.

It is more than probable, however, that a large proportion of the twenty-four missing vessels met their fate in this way. Only eight vessels in the forty years were abandoned; and in every one of these cases passengers and crew were all saved. Of the steam-ship lines now in existence, the Cunard Line is charged with the loss of two vessels—the *Columbia*, in 1843, and the *Tripoli*, in 1872, one life having been lost in the first accident and none in the second. Both vessels were wrecked. The *Tripoli* is marked with an interrogation point at the name of the company, as though her ownership were in doubt. The Inman Line's loss is given at five vessels; the Williams & Guion, 6; the Montreal (Allan Line), 7; the Anchor Line, 8; North German Lloyds, 4; Compagnie Generale Transatlantique, 5; White Star, 1; Wilson, 1; Hamburg-American Packet Company, 1; Antwerp Line, 1; and State Line, 1. The National Line does not figure in the tables, having lost only one vessel, the *Scotland*, which was practically in port when sunk, and is not enumerated, and having lost no lives.

Fashion Notes.

Cuffs are little used, tiny frills of lace being preferred.

Roman striped silks are employed for full-dress gowns.

Stylish costumes are made with high square shoulders.

Ostrich feather trimming is much used for elegant wraps.

Corded shirrings in single rows and clusters continue in favor.

Plain black silks are in greater demand than black satin or surah.

Rhine stone combs and ornaments are in vogue for hair decoration.

Red hair is decidedly fashionable, and is arranged in severe simplicity.

Elastic cloth made of stockinet is in demand for jackets and bodices.

Jabots and fichus of mull and lace promise to be as much worn as ever.

One of the late caprices in the way of a lace pin also forms a bouquet-holder.

John Harrison, the Chronometer-maker.

John Harrison eagerly improved every incident from which he might derive information. There was a clergyman who came every Sunday to the village to officiate in the neighborhood; and having heard of the sedulous application of the young carpenter, he lent a manuscript copy of Prof. Saunderson's discoveries. The blind Professor had prepared several lectures on natural philosophy for the use of his students, but they were never intended for publication. Young Harrison now proceeded to copy them out, together with the diagrams. Sometimes, indeed, he spent the greater part of the night in writing or drawing. As part of his business, he undertook to survey land, and to repair clocks and watches, besides carrying on his of a carpenter. He soon obtained a considerable knowledge of what had been done in clocks and watches, and was able to do not only what the best professional workers had done, but to strike out entirely new light in the clock and watch making business. He found out a method of diminishing friction by adding a joint to the pallets of the pendulum, whereby they were made to work in the nature of rollers of a large radius, without any sliding, as usual, upon the teeth of the wheel. He constructed a clock upon the recoiling principle, which went perfectly and never lost a minute within fourteen years.

Sir Edmund B. Dennison says that he invented this method in order to save himself the trouble of going so frequently to oil the escapement of a turret clock, of which he had charge; though there were other influences at work besides this. But this most important invention, at this early period of his life, was his compensation pendulum. Every one knows that metals expand with heat and contract by cold. The pendulum of the clock therefore expanded in summer and contracted in winter, thereby interfering with the regular going of the clock. Huygens had by his cylindrical checks removed the great irregularity arising from the unequal lengths of the oscillations; but the pendulum was affected by the tossing of a ship at sea, and was also subject to a variation in weight, depending on the parallel of latitude. Graham, the well-known clock-maker, invented the mercurial compensation pendulum, consisting of a glass or iron jar filled with quicksilver and fixed to the end of the pendulum rod. When the rod was lengthened by heat, the quicksilver and the jar which contained it were simultaneously expanded and elevated, and the centre of oscillation was thus continued at the same distance from the point of suspension. But the difficulty, to a certain extent, remained unconquered until Harrison took the matter in hand. He observed that all rods of metal do not alter their lengths equally by heat, or, on the contrary, become shorter by cold, but some more sensibly than others.

After innumerable experiments Harrison at length composed a frame somewhat resembling a gridiron, in which the alternate bars were of steel and of brass, and so arranged that those which expanded the most were counteracted by those which expanded the least. By this means the pendulum contained the power of equalizing its own action, and the centre of oscillation continued at the same absolute distance from the point of suspension through all the variations of heat and cold during the year. Thus by the year 1726, when he was only 23 years old, Harrison had furnished himself with two compensation clocks, in which all the irregularities to which these machines were subject were either removed or so happily balanced, one metal against the other, that the two clocks kept time together in different parts of the house, without the variation of more than a single second in the month. One of them, indeed, which he kept by him for his own use, and constantly compared with fixed star, did not vary so much as a minute during the ten years that he continued in the country after finishing the machine.

Physical Exercise.

In a recent lecture before the Edinburgh Health Society, Dr. Charles Cathcart pointed out the important part that physical exercise played in the development of the young, and laid down these rules for its regulation: 1. Physical exercise should be conducted in an abundance of fresh air, and in costumes allowing free play to the lungs, and of a material which will absorb the moisture, and which, therefore, should be afterward changed—flannel. 2. There should always be a pleasant variety in the exercise, and an active mental stimulus to give interest at the same time. 3. The exercises should as far as possible involve all parts of the body and both sides equally. 4. When severe in character the exercises should be begun gradually and pursued systematically, leaving off at first as soon as fatigue is felt. 5. For young people the times of physical and mental work should alternate, and for the former the best part of the day should be selected. 6. Active exertion should be neither immediately before nor immediately after a full meal.