

## WHAT I LIVE FOR.

BY CHARLES MACKAY.

I live for those who love me,  
Whose hearts are kind and true;  
For the heaven that smiles above me,  
And awaits my spirit, too;  
For all human ties that bind me,  
For the task by God assigned me;  
For the bright hopes yet to find me;  
And the good that I can do.

I live to learn their story,  
Who suffered for my sake,  
To emulate their glory,  
And follow in the wake;  
Bards, patriots, martyrs, sages,  
The heroes of all ages,  
Whose deeds crowd history's pages  
And Time's great volume make.

I live to hold communion  
With all that is divine;  
To feel there is a union  
'Twixt Nature's heart and mine.  
To profit by affliction,  
To grow truth from fields of fiction,  
To grow wiser from conviction,  
And fulfill God's grand design.

I live to hail the season  
By gifted ones foretold,  
When men shall live by reason,  
And not alone by gold—  
When man to man united,  
And every wrong thing righted,  
The whole world shall be lighted,  
As Eden was of old.

I live for those who love me,  
For those who love me true;  
For the heaven that smiles above me,  
And awaits my spirit too;  
For the cause that lacks assistance,  
For the wrong that needs resistance,  
For the future in the distance,  
And the good that I can do.

## THAT POOR STICK.

It was when they were homeward bound, in mid-Atlantic, that Mary Denning first began to doubt. She had been so happy in her love; for ever since childhood Major Herbert Knox had been her hero. His ten years' seniority had only served to shield him from the criticism of companionship. Her judgment was thus nurtured by inference, not by knowledge, and the Major's gallant bearing had been an agreeable stimulant. So, when he had met the Dennings in Switzerland, and one night while the lake was proudly saying, "See the moon is here, where my love should be, within my throbbing bosom," and the outline of the Matterhorn against the horizon was like a monolith to Truth, Mary's heart had leaped a mighty Amen to the "yes" that her tremulous lips had lisped as the Major had pressed her to him, and had told in his simple, manly way how futile life was to him without her, and how he had followed her from their distant home to confess his need. Joyous indeed had been Mary, when the next morning, at the breakfast table, her father through one of his millstone jokes had revealed the truth to their party. And when Joe Palmer, after having coughed violently and upset his coffee, had snatched hastily from the room, she had laughed with the others at the Major's remark that Joe's mother had shown more faith than prudence in at length losing her apron strings.

And Joe Palmer had rushed up to his quarters and behind bolted doors had stamped up and down the floor in a rage which found no expression until he had paused before the pier glass and had studied his tall, angular, uncouth form, his long white face, with fierce eyes, contrasting comically with sensitive lips, his shirt front bedabbled, and his clothing so evidently intended for some other man, and then he too had laughed. Not a very pleasant laugh, either, for a young man to utter who possessed health and wealth and intelligence, and whose welfare was the only and constant solicitude of a widowed mother. Yet it was this very concern which Joe now blamed as he looked back over his life. He knew that it had been a perennial jest among his neighbors and friends, that it had deprived him of the harsh discipline which makes boys manly, and had gained for him the name of a mollycoddle. He remembered that while Herbert Knox had dashed by on horseback, he had been trundled by his nurse; that even while little Mary Denning had climbed fences and trees and had gathered flowers through the fields, he had not dared to stray from the gravelled walk. He realized that while those who should have been his comrades had grown up with purposes and responsibilities which breed self-reliance, he had been tended even into early manhood within the hothouse of maternal anxiety. Was it a wonder that when shame had released him he should seem different from other young men, he who had never run a race, nor played ball, nor fought a quarrel to a bloody end? Was it a wonder that he was strange and diffident and awkward, when the only ways that he had been taught were those ways that every one, including himself, despised?

Was it, indeed, any wonder that his thrifty, energetic townspeople, finding him so unlike themselves, should relegate him to the limbo of ne'er-do-wells under the sufficient accusation of being a poor stick? They little knew that he had darling purposes, ambitions buried, but buried in his heart; that he longed to be an influential, powerful man among men, commanding respect, forcing compliance with his views. They little knew that he dreamed of a home which should be the happiest home in all Aberdeen, since the Queen of its women should their reign. They deemed him a hunk of a boy, the spoiled child of a doting mother, who, if he developed acuteness enough to take care of the wealth which surely would be his, would surpass kindly interest.

An unhappy life, filled with reveries that never were realized, with regrets that always had a cause. How could he hope, how could he act when everything he said and did resulted in a jeer? And yet he had believed that Mary Denning knew him, was able to discern intention in awkwardness and beneath uncouthness to see a tender, sympathetic heart. And so when she had gone to Europe with her people he had overcome the tearful importunities of his mother, finding shame in a facile victory, and had

joined their party in Switzerland, being tolerated, so he felt, as a harmless creature, out of respect for old-time intimacies.

Alas for the wild hopes of the journey thither! On his arrival he had found Major Herbert Knox in full possession of the field. What was there for him to do except to accept the inevitable and take his place as a camp follower in the presence of such a conqueror? For the Major had always been the beau ideal of impossibilities to poor Joe. Handsome, athletic, graceful, his bearing merited the title which local militia had given him. A fine, manly-appearing fellow, truly, carrying his straight six feet of brawn and sinew as deftly as a Court page; affable, yet dignified, approachable, yet asking a "qui vive?" through his earnest gray eyes, which the firm lines of his mouth warned all to answer.

And so Joe had clung to the Dennings in miserable uncertainty, which he knew to be all too certain, until the blow had fallen, and then he had coughed and sputtered coffee, and stumbled to his room to continue the laugh at himself. His life was ended. No one cared, for him nor believed in him, except his mother, and alas! it was the image of her own credulity that she worshipped. Poor woman! she had meant to be so good to him. The least he could do was to return to her, and since she found her chief delight in petting, to let her pet in defiance of all banter. Others who were composed and gallant, to whom an emergency was a triumph, not an aftermath of self-reproach, might aspire to the nobility of word and deed; what concern could one have with such station whose beard was scraggy and whose left foot turned in when walking?

Joe, therefore, decided that he would return with the triumphant Dennings. Even if Mary could never be his, it was far more comfortable to be miserable in her presence than away from her, and whether he inopportunistly groaned or guffawed it was all one to them; he was only Joe, and they discovered complicity in his endurance. Perhaps they never noticed it, for he himself was unaware of it; but Joe's thoughtfulness rounded many of the sharp edges of travel for them. He was an accomplished linguist—he must need have learned something in his idleness—and then, of course, he wasn't sought after as the Major was, by all the young tourists whom they met, and so he had abundant time to manage well enough a thousand and one details which the Major could have managed exceedingly well. Once, indeed, Mr. Denning did enounce that "if Joe wasn't Joe there really might be something in the fellow"; but this was after Mr. Denning had dined into repulsion and his concession was expansive.

Only Mary, in the midst of her joy, would sometimes feel a reasonable remorse as she glanced at Joe, and this would engender a brief gentleness toward him, brief, since its reception would be so grotesque. The party found that the steamer on which they were to sail would be unusually crowded; the steerage was swarming with the detritus of the Continent; the cabins were crowded with pleasure seekers who had exhausted their purpose. This press could not have affected the Dennings, for their room had been held for them, but their friends, the Grangers, a young couple with a little daughter, were not so fortunate, and yet affairs at home urged their departure. So Mary willingly welcomed Grace Granger as a roommate, while Joe accommodated her parents by bunking with the Major, much to the latter's displeasure, had not his sweetheart's smiles been an assuaging reward.

And so the great ship sailed on its way, a microcosm with penury and filth next door to wealth and luxury, yet ignored because they were unseen. But such disagreeable neighbors sometimes compel a recognition of their proximity, and when this occurred, as it did in mid-ocean, then it was that Mary began to doubt.

The ship was an old one and insufficiently manned. There had been constant complainings from the first-class passengers who as such, of course, could not realize when they were well off. But one morning terror revealed to them the pettiness of their woes. It was the Major who first heard the news. He was enjoying an early stroll on deck as was his wont, when an officer with whom he had become friendly beckoned him mysteriously aside and said:

"We don't want it generally known, and that's why I tell you. A man of your presence and nerve can be most useful in promoting cheerfulness. The cholera has broken out in the steerage."

The cholera! That greenish livid spectre of agony and sudden death! The Major took three or four vigorous pulls on his cigar, and then he threw it away. Somehow his stomach was not quite right for smoking. He turned savagely on his informant.

"What kind of a company is this of yours?" he shouted. "First you treat your passengers like dogs and then you introduce the plague among them! Its outrageous, and if there's a law that can reach your people they shall suffer for it. The cholera in this dirty, crowded hulk!"

"Sh! Sh! Sir!" interrupted the officer anxiously. "Not so loud. We must keep it secret. Fear is worse than contagion."

"Don't tell me," snapped the Major. "Even the condemned are given a few moments' preparation. The passengers should protect themselves by concerted action; and it won't be my fault if they don't. The cholera! My God, how badly I feel!"

Shaking off the restraining grasp the Major rushed into the smoking-room. It was vacant, for breakfast had not yet been served. As quickly as service could fetch them he gulped three long drinks of brandy, and then the complacent smile which had strayed returned to his face. He even lighted another cigar. After all it might be a false alarm. And in any event it surely would not trouble a man like him. Direct contact might be dangerous indeed; but he would guard against that. Doubtless a lot of cattle like the people in the steerage might breed a pestilence, but he who was so clean, so wholesome, such a believer in the virtues of air and water, oh, no! And yet, disease was no respecter of persons:

suppose that it should come to him? It was so fatal, so instantaneously fatal! Why, before a man could think, he was seized, he was gone! A foul, loathsome death! Ugh! It was like being smothered in filth. Then overboard, in a sack, to float suspended in the cold, sullen depths. Oh, no! a man had no earthly show; if he had, like storming a rampart or dashing on horseback with a message to the front, why, then, the Major would be there. But now, "sauve qui peut" was good enough for him. Let fools and women do the encouraging, he would look out for number one. Strong men were always favorite marks—here the Major threw away his cigar. He had had a tendency even as a boy. Oh, to think of this horrible ship and its horrible freight! If one could only escape—here the Major walked up and down the floor and mung for another "go." And at this juncture Joe Palmer entered. He had just scared Joe would be when he heard the awful tidings. Even in his anguish the Major smiled.

"Oh, Joe!" he exclaimed. "We're done for, we're doomed! The cholera is aboard. The steerage people are dying like poisoned rats in a hole."

"Cholera," said Joe. "That's bad. Hum! Aren't you coming to breakfast?"

"Breakfast! You fool. Can't you realize the position you're in? We are doomed, I tell you, I, old Denning, Mary, everybody! And you talk about breakfast! Don't you know that the food is surely infected? The only thing to do is to keep by one's self and drink lots of brandy. Will you try a ball?"

"Thank you, no," replied Joe simply. "I never drink in the morning; it makes me nervous. Of course I realize that the situation is most critical, and I know that we agree as to how it must be met. Ignorance is the only salvation for all these delicate, excitable people. The disease can be confined to the steerage, I'm sure, and no one will be the wiser except you and me, and we can stand it, hey, Major? Those poor devils, I wish I could help them, but we must be selfish for Mary's sake."

"I shall warn every one."

"Don't be a coward, Major."

"Coward! If we were ashore I would make you eat that word. Just wait—"

But Joe had turned on his heel and hastened away. A great light had burst over his mind dispelling a boyish phantasy. Thenceforward he respected himself. Unluckily, however, on his departure, other passengers entered the room, and to these the Major detailed the ominous news. It scattered like sparks throughout the ship, and sobs and pale faces and curses attested its havoc.

The captain, accompanied by Joe, interrupted the Major's wild harangue. "So," began that officer, "you have planned a manly part, haven't you? Directly I heard of your intention, sir, I was going to lock you in your state-room."

"Don't you attempt to bully me," retorted the Major. "I know my rights and my duties. You shan't poison us unaware while I'm on guard. Come, boys, another round of that preventive."

Some of the company applauded, but others turned away with disgust, and to these the Captain and Joe presented the course of cool, deliberate action so forcibly that under their co-operation the reign of order was in a degree restored. But the Major remained pot-volant in the smoking room, and if his absence was remarked, one faithful heart at least, amid bewildering doubts, strove to find excuses.

The next morning, when Joe arrived on deck, there was the Major exhilarated and beaming, laying down precepts to an admiring coterie.

"Hallo, old sour cheeks," he shouted. "You look like the personification of our good guest. Come, don't be downhearted, man; brace up and show some nerve. What if life be short, if it shall only be jolly?"

"I can't keep my thoughts from those sufferers below," said Joe, gravely. "Think of the horrors of that black hole. At best—"

Here an under-steward approached, handed a note to the Major, and retired. The Major glanced at its superscription and smiled resignedly. He opened it. The stick vanished. The note floated to the deck.

"Oh!" he cried. "It's infected. Look out!"

The group scattered, but Joe picked up the offending missive.

"What is it?" he asked, with a retort by the rail. And Joe read as follows:

"DARLING: Little Grace is very sick—and I fear. She has played between decks, you know. I shall stay by the poor child, of course. Take care of your dear self. Your Mary."

"What are you going to do?" Joe demanded, leaning near.

"Keep that thing away from me. I'm going to wash my hands with vinegar as soon as I can."

"I shall go to her," Joe said.

"Don't come back to my room," Joe demanded, leaning near.

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## THE WHISTLING BUOY.

How, Why, When and Where it Whistles.

In New York Bay, a few days ago, I heard one of the most unearthly sounds that ever assailed the ears of mortal man. It was like the wail of a lost soul. So uncanny was it that timid passengers on the excursion boat suggested—horrible thought!—the ghosts of some cholera victim might be walking the water. Once in ten or fifteen seconds it—whatever it was—emitted a shriek which might have come from the depths of inferno.

While the other passengers listened, almost in awe, and racked their brains for a solution of the mystery, I sought the captain. Like all seafaring men on duty, he was somewhat uncommunicative. All he said in response to my enquiry was, "Whistling buoy."

Of course it was a whistling buoy. If I had been anything but an idiot of a landlubber I should have known that much without asking. I wanted to ask the captain some further questions, but didn't dare. A boss mariner is not an easy individual to interview. He has a way of turning on his heel and giving you a grand snub which is decidedly unpleasant. So I discreetly returned to my fellow-passengers, and with a little show of pride, informed them that the shrieking thing was not a lost soul, nor a shrieking, nor a cholera ghost walking the water, but a plain, simple, useful whistling buoy.

"What makes it whistle?" chorused a dozen voices. That is precisely what I should have asked the captain had I had the nerve. Almost with shame I confessed I didn't know what made the buoy whistle. I had had experience with other kinds of whistling boys—young boys and old boys—but never with this shrieking, aqueous variety.

What did make the infernal thing whistle anyway? I could not accept the suggestion offered by one of my funny friends that it was the wind blowing through its whistles. None of the other suggestions seemed rational, and we simply gave it up.

The next day I returned to Washington and made straight for the office of the Lighthouse Board. I was determined to dispel at least this much of my ignorance. In the top story of the big Treasury Building I found the Light House Office. In this office I found Chief Clerk Johnson. "I exclaimed before I could catch my breath from hurrying up the stairs, 'What in heaven's name is it that makes a whistling buoy whistle?'"

Mr. Johnson smiled and told me to sit down. "A whistling buoy whistles," he began, "because it contains a whistle. Instead of steam, air is used. As the buoy rises and falls on the waves air is compressed in a tube and forced out through the whistle, producing an inexpressibly sad and mournful sound."

"Yes, I know that."

"The whistling buoy now in use by the United States lighthouse system is a patented device," Mr. Johnson continued. "It consists of an iron pear-shaped bulb twelve feet across at its widest part and floating twelve feet out of water. Inside the bulb is a tube thirty-three inches in diameter, extending from the top through the bottom to a depth of thirty-two feet into water free from wave motion. On the top of this tube, high above the water, is placed a ten-inch locomotive whistle. At its lower end the tube is open, so that it is constantly filled with water. In the top of the tube are two holes, through which air is admitted, and one hole through the whistle. These holes are connected with three pipes which lead down to near the water level, and there pass into an outer chamber of the cylinder. Now you can readily see that the great bulb rises and falls with the waves, carrying the tube up and down with it, thus establishing a piston and cylinder movement. The air is compressed as a result of this movement, and when forced through the whistle makes a noise that can be heard, under favorable circumstances, at points fifteen miles distant."

"Have we many of these buoys?"

"Yes. I think there are now nearly seventy of them on the coast of the United States. They cost more than a thousand dollars each and weigh six tons. It is a curious fact that in proportion as they are useful to the mariner they are obnoxious to people living within earshot of them, and whenever we put in a new whistling buoy on an inhabited coast, we have remonstrances pouring in from the people."

"When a bell buoy will do as well, we put that kind in, for a whistling buoy is a dreadful nuisance, especially when there is a storm, and the turbulent waves compress the air with force enough to produce a sound fit to raise the dead."

"What is a bell buoy?"

"The bell buoy is also very simple," said Mr. Johnson. "It is made of iron, floats on the water and carries fixed a 300-pound bell. On a plate under the bell and close to it a cannon ball is placed, and this ball rolls around as the waves disturb the buoy, causing it to rattle around the bell."

"Like the whistling buoy, the bell buoy sounds the loudest when the sea is roughest, but the latter is adapted to shallow water, where the whistling buoy could not ride, and is preferred in harbors and rivers, where the sound range required is not so great, while the whistling buoy is placed in the open sea or in roadsteads. We have about seventy-five bell buoys, which cost \$30 apiece."

"Let me tell you something more about the buoy business," continued Mr. Johnson. "I think the facts will astonish you. Probably very few people understand the importance of the buoy system as they are useful to the mariner by day what the light is at night and what the fog-horn is in thick weather. It tells him by its size, form, color and number how to avoid rocks and shoals, and shows the way in and out of harbor. When it is a bell or whistling buoy it works at night as well as by day, in thick as well as in clear weather, and takes the place of lighthouses and lightships."

that it has its own directory, printed yearly in thirteen volumes and distributed free for the guidance of mariners.

"In this service they are of all kinds nearly 5,000 buoys. Merely to indicate the system to which the buoy service has been reduced, I will mention that red buoys, with even numbers, are placed on the right-hand side, and black buoys with odd numbers, on the left-hand side. Buoys placed on shoals or wrecks having safe channels on either side, are painted with red and black horizontal stripes, while perpendicular stripes indicate that the buoys must be passed close to in order to avoid danger. In many cases ways the marking of buoys is made a guide post to the mariner."

"So far we have made but one effort to light buoys with electricity, and that is in New York Bay, where six buoys marking Gedney's Channel are lighted at night by means of electric lamps fed by submarine cable from land. This plant is a great success. Each buoy has its own cable, so that in case of accident to one the other may not be interrupted. Electricity may in time be applied in this way in many harbors and roadsteads, the result of our experience in New York having demonstrated the entire feasibility of the plan beyond any particle of doubt."

"Many people wonder why electricity has not been applied more generally to light buoys. The explanation is that the lights produced by land oil and other illuminants now in use are seen, located and identified as far as the curvature of the earth will admit, and no evidence is at hand to show that electric light could be seen and identified better or more clearly discerned in fog."

"At Hell Gate some years ago we had a beautiful electric light placed upon an iron tower 225 feet high. There were nine lights each of 6,000 candle power and designed to illuminate that intricate and dangerous channel as by artificial daylight. At night the effect was simply grand. The tower itself could not be seen, and the light appeared as if hung from the heavens. But the light was so bright that it dazzled the eyes of the pilots and prevented them seeing objects beyond the circle illuminated. The shadows thrown were so heavy that they took the form of obstacles, and the light had to be discontinued. Having an electric plant near at hand, we lighted the Sandy Hook beacon with electricity, but made it a fourth-rate power, so it would not dazzle the eyes of pilots."

"Do you not lose many buoys?"

"A great many. Passing steamers run into them, and spar buoys are cut off by propeller blades. Despite State and national laws vessels and boats sometime tie to buoys. Occasionally buoys are set adrift that rewards may be obtained by their recovery. Ice is the worst enemy of buoys. Twice in one winter New York harbor was swept clear of buoys."

"The seagoing qualities of the large iron buoys are shown by their volunteer voyages. Several of them have made their way to Europe in the Gulf Stream."

"Mr. Johnson, I have heard a good deal about the siren foghorn. How far can one be heard?"

"Thirty miles is the limit, and there under the most favorable circumstances. We have beaten the world on fog signals and their cost was \$700,000. I want to call your attention to a curious fact in the use of fog signals. The general supposition is that sound is always heard in all directions from its source, according to its intensity of force. But this is not true. Sound has some remarkable characteristics, and failure to understand them has led to disaster and death."

"Twelve years ago the wreck of the steamer Rhode Island, on Narragansett Bay, which involved a loss of a million dollars, was ascribed to the failure of the fog signal on Beaver Tail Point to sound at that time. Of course we made an investigation, and found that the siren was sounding all the time. But we also discovered that where it should have been heard loudly it was not heard at all, and it was very clear that it could be heard and lost and heard and lost again, all within easy earshot."

"Another instance was when the steamer City of Richmond approached land in the Maine waters, bearing a Whitehead fog signal distinctly six miles from shore but at three miles from shore the sound suddenly ceased and was not heard again till the steamer was within a quarter of a mile of the station. Repeated tests have shown that this was a true state of the case, and Col. Blunt, of the Engineer Corps, has explained the phenomenon in this way: The sound wave strikes the water near the station, and is deflected so high in the air that for a considerable distance they rise above the deck of a ship. Farther out at sea they return again to the water level. What is known as Blunt's diagram is now generally accepted as an approximate solution of the mystery."

## Relics of Aaron Burr's Trickery.

From time to time for several years past workmen employed in digging up down-town New York streets for improvements have unearthed sections of wooden pipe—legs with a bore of about five inches—which serve no present use. These relics recall the story of the political jealousies and hatreds of a century ago, which resulted in the duel of Hamilton and Burr. Hamilton had practically a monopoly of the banking business of the city at that time. Burr desired to engage in the same business. He could not do so without a charter, and a charter could only be obtained from the Legislature. The Federalists, led by Hamilton, controlled the Legislature, and Burr was the leader of the Republicans. He could get no bank charter, but he and his associates did get a charter for the Manhattan Company to supply the city with water, and "for other purposes."

A reservoir for supplying water was built at the corner of Duane and Centre streets, and the wooden mains were laid through Park Row and Broadway. The logs uncovered yesterday were part of that primitive water supply system. The Manhattan Company did not limit its business to supplying water, but soon established a bank under the general provisions of its charter, and that bank, known as the Bank of the Manhattan Company, is still in existence at 50 Wall street. Burr had outwitted his rival by a legislative trick. —[Boston Transcript.]

A uniform increase of rates on Mexican railways has been decided on.