

ENGAGED.

The little bond that binds your life to mine
Seems slight and fragile; do you think 'twill hold.
And bear the changes of the coming time,
When life is dark and all is bleak and cold?
And do you think that, purified by pain,
We can take up our lives and love again?

Or when, like the inconstant sides of Spring,
Our lives are clouded or like sunny air,
And we know pain that seems to hold a ring,
Will you not lend it all too fast to bear?
And when these storms and weary hours have
Tried us,
Can we live on and let no power divide us?

Then if this little chain, so frail and weak
If it must break, and we must humbly bow,
Could find a voice and each small link could
Speak,
Would it not say 'twas frightened of the night,
If it must break, and we must humbly bow,
In pity for my weakness, break it now.

But if you think that it can bear the weight
Of fiery trials as they come and go,
We can take heart and boldly meet the fate
That gives impartially of joy and woe.
And be it summer fair or wintry weather,
We can be brave, and meet all, love, together.
—Eva MacDonagh, in Harper's Weekly.

THE KING OF SUNS.
Wonderful Facts Regarding Sirius,
the Dog Star.

A Mighty Giant Among Stars, Compared
With Which Our Own Sinks Into
Insignificance—The Brightest
Star in the Heavens.

In the entire firmament, embracing both hemispheres, there are about six thousand stars visible to the naked eye, and among this immense number, one in particular, owing to its remarkable brilliancy and superior magnitude, must have attracted the attention of all persons who enjoy an occasional survey of the heavens in the winter season. From time immemorial this star has been observed with the greatest solicitude by poets, divines and philosophers, and is known to astronomers by the name of Sirius—the famous "dog star" of the ancients.

There is no other star in the heavens that has been more universally observed, and around which there cluster so many ancient associations and superstitions, or has received more attention from astronomers in all ages of the world. Whoever has looked upon this beautiful star, located in the brightest region of the heavens, and seen it glowing and scintillating on a clear and frosty night in winter, must have beheld with awe and admiration its indescribable splendor; and one need not be an astronomer to admire its radiant glory, or to conclude that this charming orb possesses characteristics distinguishing it from any other star in the firmament, even those of the first magnitude, with which it is classed by astronomers.

It is true that "one star differeth from another star in glory," and among the 50,000,000 stars revealed by the great telescopes of the present day, the most surpassing glory unquestionably surrounds the peerless "dog star," which has been a prominent celestial object from the earliest ages, and has played a somewhat important part in the history of mankind.

Sirius belongs to the little constellation, Canis Major, a group of thirty-one stars situated just south and east of Orion, and almost universally known from the unrivaled brilliancy of its leading orb, but which otherwise possesses no noteworthy attraction.

When observed through a large telescope, Sirius presents a charming appearance and shines with a brilliancy that is startling to the beholder. The light of this star is so strong that, when the glorious orb is entering the field of a powerful telescope, its approach is announced by a bright dawn, like that which precedes the rising sun; and when the star itself enters the field of vision it shines with a dazzling splendor, and its brilliancy is so great as to require a colored glass to protect the eye. Sirius is not only the brightest star in the heavens, but is more than three times brighter than an ordinary first-magnitude star, and is believed to be 500 times as bright as a star of the sixth magnitude—the faintest visible to the naked eye. The author of a recent work on astronomy says: "Every body has heard of Sirius, or the dog star, and everybody must have seen it flashing and scintillating so splendidly in the winter heavens, that to call it a first-magnitude star does it injustice, since no other star of that magnitude is at all comparable with it. Sirius, in fact, stands in a class by itself as the brightest star in the sky. Its light is white, with a shade of green, which requires close watching to be detected. When it is near the horizon, or when the atmosphere is very unsteady, Sirius flashes prismatic colors like a great diamond, and your eyes will be fairly dazzled when you turn your glass upon this splendid star."

It is believed that remarkable changes have taken place in the color of Sirius since it was first observed by astronomers. Whether or not this is the case, it is now a well established fact that the stars change their color, and many instances of the kind have been noticed in various parts of the heavens. Sirius was described by the ancients as a fiery red star. Many years ago it was said to be pure white, but it is now becoming of a decided green color, as a careful observer will readily perceive when this star is visible on a clear winter evening. Yet, many eminent astronomers do not believe that Sirius has changed in color, and a recent writer on the subject says: "The question has been much discussed as to whether Sirius was formerly a red star. It is described as red by several ancient authors, but it seems to be pretty well established that these descriptions are most of them due to a blunder made by Cicero in his translation of the astronomical poem of Aratus. It is not impossible, though it is highly improbable, that Sirius has changed color."

Owing to the remarkable size and brilliancy of Sirius, it was once naturally regarded as the nearest of the stars, but its distance is in reality so great that it has never been satisfactorily determined. The most reliable authorities, however, assign to Sirius a

distance of 100,000,000,000 miles, which is five times the distance of Alpha Centauri—the nearest star known to astronomers—and a million times the sun's distance from our earth! It has been estimated that the brilliancy of Sirius is 300 times greater than that of the sun, and if we assume that the intrinsic brilliancy of its surface is the same as the sun's, the surface of this star must be 300 times larger than that of the sun, from which it follows that the diameter of Sirius is about eighteen times that of the sun, and its volume about 2,300 times greater! Prof. Garrett P. Serviss, referring to Sirius in a recent magazine article, says: "According to recent estimates Sirius, while shining with perhaps seventy times the light of our sun, is only between two and three times as massive, so that the intensity of its radiation is enormously greater than the sun's. Planets situated as close to Sirius as the earth and the other inner planets of our system are to the sun would be unable to endure, so far as their life-bearing functions are concerned, the gush of heat and blaze of light poured upon them—unless, indeed, the organization of living beings there were entirely different from that prevailing here. We should then expect such stars as Sirius, if they are the centers of the planetary systems at all, to be surrounded by globes revolving at comparatively great distances and in long periods of time."

The mind utterly fails to comprehend the immeasurable distance which separates our earth from this immense orb. Light, which travels with the almost inconceivable velocity of 186,000 miles per second, requires twenty-two years to traverse the distance between Sirius and our earth. We may justly consider this brilliant sun as the center of a system of revolving worlds, and imagine them as being inhabited by creatures far more advanced in intellectual development than ourselves. But we are at a loss to conceive of the vast scale on which the system of such an immense sun must necessarily be constructed; and when, in addition to the startling facts already mentioned, we consider the recent discovery that Sirius, with its entire family of planets and comets, is rushing through space with enormous velocity, the mind is bewildered in contemplating the wonders of this stupendous orb. By means of the spectroscopic, Prof. Huggins, the eminent English astronomer, has found that Sirius is receding from our earth at the rate of twenty-six miles per second; and yet, even with this almost incredible velocity the passage of a thousand years will make no perceptible difference in the appearance of this brilliant star, so immense is the distance which separates it from our earth.

One of the most interesting results of the observations directed to this wonderful star was the discovery that it is attended by a companion or satellite, the existence of which had long been suspected by astronomers, and which was finally detected by mere accident. The presence of this object had been revealed by the effect of its attraction upon Sirius, the motion of which varied in such a way as to indicate a powerful disturbing influence in its vicinity. The famous German astronomer, Bessel, nearly fifty years ago expressed his belief that the periodical variations in the motion of Sirius were produced by the attraction of an invisible companion, revolving around the immense orb. Several astronomers had calculated the orbit of the attracting body, and its direction from Sirius at various times, and, though it was diligently searched for, it continued to elude detection, even by means of the most powerful telescopes. But in February, 1862, the eighteen and one-half inch telescope which was being constructed for the Chicago observatory by the late Alvan Clark, the famous optician, was pointed to Sirius as a test of its power, when the disturbing companion came suddenly into view, at a distance of about ten seconds from the large star, and exactly in the direction which had been predicted for that time.

We find, then, that Sirius is a "double star," the two components being physically connected, and forming what is known as a "binary system," the smaller star revolving around the larger, or both around their common center of gravity. Owing to certain irregularities in the motion of the smaller star, which cannot be explained, some astronomers are of the opinion that Sirius has another disturbing companion, the existence of which is indicated by its attraction only, and which may eventually be discovered.

In conclusion, we reproduce the interesting remarks of Prof. Daniel Kirkwood, regarding Sirius and its companion, published in Appleton's Annual Cyclopaedia for the year 1876: "From the discussion of the observations of the companion of Sirius, Dr. Auwers has found the period of revolution to be 49 years 146 days; the semi-axis of the orbit thirty-seven times the distance of the earth from the sun, and the eccentricity 0.6148—somewhat greater than that of Faye's comet. The mass of the companion is half that of the principal star, or more exactly, the mass of Sirius is 13.76, and that of the telescopic star 6.71, the mass of the sun being unity. As the light of Sirius, according to Sir John Herschel, is 224 times that of an average star of the sixth magnitude, and as the satellite discovered by Clark is of the ninth or tenth magnitude, the light of the latter must be much less than 1-1,000 part of that received from the principal star. The facts seem to indicate a remarkable difference between the physical constitution of Sirius and its satellite."—Arthur K. Bartlett, in Chicago Inter Ocean.

—Office Boy (to Employer)—"I've got a complaint to make, sir." Employer—"Well, what is it?" Office Boy—"The cashier kicked me, sir. I don't want no cashier to kick me." Employer—"Of course he kicked you. You don't expect me to attend to everything, do you? I can't look after all the little details of the business myself."

THEY TELL THE STORY

Official Records Show Why Quay's
Bravery Was Recognized.

MEDAL OF HONOR GALLANTLY WON

Members of Many Military Organizations Resent an Insult to Their Comrade, Pennsylvania's Junior Senator.

Members of the Grand Army, the Loyal Legion, the Legion of the Medal of Honor and other military organizations in which Colonel M. S. Quay holds active membership, since the last malignant assault on the junior senator and criticism of his soldier record by Dalzell's Philadelphia organ, are showing a deeper interest in his candidacy for reelection.

Colonel Quay's Friends Active. It appears that during Senator Quay's recent illness some of his old soldier comrades, after the endorsement of his candidacy was gotten up by survivors of his old regiment, prepared a document in which a brief mention was made of the colonel's army record. Reference was made to the fact that he had been awarded a medal of honor for bravery at the battle of Fredericksburg. In the blindness of the fury with which the Dalzell men are assailing Senator Quay, their Philadelphia organ attempted to detract from the honor that had been conferred upon the distinguished Beaver soldier and statesman. They even disputed the claim for the medal which is so highly prized by Senator Quay and his beloved wife and children.

Records of the Colonel's Bravery. The records of the war department have been looked up, and here is the official entry regarding Colonel Quay's medal:

WAR DEPARTMENT,
ADJUTANT GENERAL'S OFFICE,
WASHINGTON, July 9, 1888.

Hon. M. S. QUAY,
United States Senate.
Sir—I have the honor to transmit herewith a medal of honor granted to you as colonel of the One Hundred and Thirty-fourth Pennsylvania volunteers, by the secretary of war, for distinguished services at the battle of Fredericksburg, Va., Dec. 13, 1862.

This medal is issued on the request of Colonel William H. Shaw, Captain J. M. Clark and fifty other surviving officers and soldiers of the One Hundred and Thirty-fourth Pennsylvania volunteers, and on the presentation of satisfactory evidence by them showing that, under the law, you are entitled to same. I am, sir
Very respectfully,
Your obedient servant,
R. C. DRUM,
Adjutant General.

The following is an extract from the report of Brigadier General E. B. Tyler, commanding First brigade, Third division (Brigadier General A. H. Humphreys), Fifth corps (Brigadier General Daniel Butterfield):

CAMP IN THE FIELD, Dec. 10, 1862. Headquarters Tyler's brigade.
Colonel M. S. Quay, late of the One Hundred and Thirty-fourth Pennsylvania infantry, was upon my staff as a volunteer aide-de-camp, and to him I am greatly indebted. Notwithstanding his feeble health he was in the saddle early and late, and efficient, and especially so during the engagement on the field.

It will be seen from General Drum's letter that the medal was awarded to Colonel Quay while Mr. Cleveland was president and Mr. Endicott was secretary of war. The testimony of survivors of the One Hundred and Thirty-fourth Pennsylvania infantry shows that Colonel Quay had resigned from the service on account of typhoid fever, but when he heard that a battle was near declined to leave the front; that he applied for permission to lead his regiment in the battle, but having resigned, that right had of course become vested in the lieutenant-colonel, and the permission could not be granted; that he therefore volunteered as an aid upon the staff of the brigade commander, General Tyler.

Scene of a Terrible Slaughter. The charge at the battle of Fredericksburg, in which Colonel Quay took part, was one of the most terrible and thrilling incidents in the war. Five Confederate brigades were entrenched behind a stone wall. Two hundred Confederate cannon on Marye's Heights covered an intervening plain. In an effort to dislodge the rebels, General Humphreys' forces were frightfully slaughtered by the artillery. Over 6,000 Union soldiers were left dead at the foot of the hill. Over half the loss of the Fifth corps fell on Humphreys' division, of men from Pennsylvania, and General Tyler's small brigade, with which Colonel Quay served, in a perilous position, lost 454 men. General Longstreet says that that plain, filled with Union dead, was one of the most distressing sights he ever saw.

One might as well express doubts as to the force of Niagara or the heat of the sun as to question the peril and courage of any man who charged with Humphreys' division across that bloody plain and by his soldierly conduct won the respect of the men who charged with him, the confidence of his superior officer and a medal of honor from congress.

POLITICAL MASQUERADERS.
Philadelphia Mugwumps and Their Guerrilla Warfare on Republicans. That crank gang of Mugwumps in Philadelphia, says the Harrisburg Telegraph, who are masquerading under the name of the Reform Republican league in order to cut the throat of the Republican party, is meeting with little encouragement in its guerrilla warfare against Republican leaders. Why doesn't some good Philadelphia Republican newspaper give us the names and political history of the members of this "Reform league?"

We have no doubt, adds the Miners' Journal, that this league, if its membership could be known, would be found to consist of the same old Philadelphia coterie who appear as reformers or independent or Republican leaguers, as the occasion seems propitious. They are not authorized to speak for the Republican party or any element thereof, but are really Mugwumps, the sort of people whom Samuel J. Tilden once neatly characterized as being men who import malice into politics without even the excuse of party bias.

Should Stand Together. All Republicans should stand shoulder to shoulder for the peerless politician, statesman and soldier, Matthew S. Quay. —Wellsboro Republican.

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\$4.00 Hand-sewed Welt Shoe, fine calf, \$4.00 style, comfortable and durable. The best shoe ever offered at this price same grade as our command shoes costing from \$5.00 to \$6.00.

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