

WHOM THE GODS LOVE.

You say that being so old
'Twas time for him to die?
Rings not your comment cold
And even inhuman? Why
Should tender tears be shed
When death laves young lives low
Spared years of sorrow and fret,
Spared age's overthrow?

When young we are called away,
We shrink until regret;
For another time will stay
Not mere ourselves, but yet
Brand with anthen is sign
His despoil us elsewhere—
Drape wisps of silvery hair
O'er eyes beloved—plough line
And furrow on treasured cheeks.

"Whom the gods love die young,
Ah me! their wisdom's tongue
With sovereign accent speaks!

Pity the old who die;
The young behind them leave
Such bounteous grief whereby
Fate bids they should not grieve
Heart-tackled with many a sigh,
Wounded with many a scar,
Pity the old who die;
The young are happier far!
—[Edgar Fawcett, in Lippincott's.

THE FORTUNE OF WAR.

The room was comfortable enough. It was the guest-room of an old Virginian farm-house on the James river; but the farmer was away, fighting in Lee's army for the defense of Richmond, and a half-squadron of Sheridan's Horse, on out-post duty, occupied the building. The furniture of the room was old-fashioned, solid and substantial. The bed had curtains; the floor was carpeted and prints hung upon the walls. The last place in the world that the room resembled or suggested was a prison. Yet the man who walked perturbed up and down the floor was a prisoner—a Confederate prisoner of war; and the other man, who paced the court-yard outside, beneath his window, was a Federal soldier guarding him.

The prisoner had made no attempt to sleep. From 10 at night, when they had locked him there, till three in the morning, he had been feverishly striding to and fro almost without a break. When he had thrown himself, from time to time, upon the bed, it was to think and not to rest. Partly he was weighing chances, and wondering whether it was possible that Stuart's Cavalry would swoop down suddenly and rescue him; but his mind almost dwelt upon the one paramount horror of the position, in which he found himself.

His lamp was still burning, and there were pens, ink and paper lying on the table. He had asked for this favor, and his captors had granted it without demur. As they were going to shoot him at daybreak, they could scarcely grudge him so trivial an indulgence.

There was something which he wanted to write before he died, a last message to his mother in South Carolina, who was praying for his safe return. Three times already he had begun the letter, and then stopped and torn up what he had written. It was difficult to write without telling either too little or too much. At first he had intended to suppress all that was really essential in the story. But within the last hour something had happened which had changed his mind, and resolved him to write down the plain truth about the things that had befallen him. Cruel as the truth was, it was not dishonorable. Better, he thought, that his mother should hear it, than that apocryphal, and perhaps calumnious, tales should reach her ears. So, with an effort, he calmed himself, and took up his pen and wrote:

"MY DEAREST MOTHER: Whether this letter will ever reach you I cannot say, as I shall have to trust to the kind offices of the enemy for its safe transmission. In any case, before you receive it you will have heard the worst. You will have heard that I am dead. At the moment when I write this I have only two or three more hours to live, as I am sentenced to be shot at sunrise. If these lines reach you, you will also know that you have no reason to be ashamed of me, or of my brother Jefferson, who is sleeping in the next room to me, and whose prisoner I am."

"Jefferson's prisoner? That puzzles you, no doubt. Well, I will soon make you understand. It has happened very simply."

"I was serving, as you know, with Stuart's cavalry. General Stuart wanted some information which could only be obtained by passing inside the Federal lines. Happening to know the country better than most, I volunteered for the service, and, disguised as a farm hand, made my way in the direction of Richmond. I obtained my information, but on the road back I was taken by two of Sheridan's troopers. They searched me, and, unfortunately, I had concealed about me some plans I had made of the Federal defenses at Bermuda Hundred. So they brought me along to this farm house on the James river, where they are stationed under the command of my brother Jefferson—Captain Jefferson Langley of the Federal Army."

"I didn't know any more than you did, that Jefferson was fighting for the North. I hadn't seen him, any more than you have, since that day he ran away from home five years ago. I didn't even know he was alive. But when the Sergeant marched me in front of him I recognized him at once."

"He wasn't so quick at recognizing me; but that's not wonder, for, as I told you, I was disguised, and I had a ten days' beard by my face. He began questioning me."

"You have been arrested within the Federal lines. Compromising documents have been found upon your person. You are accused of being a Confederate spy. Has you anything to say in your defense?"

"Nothing," I said.

"Jefferson looked up. My voice seemed to remind him of something—he didn't quite know what. Then he went on:

"By military law the punishment of the crime of which you are accused is death."

"I know it," I said.

"Jefferson looked up again."

"If," he said, "you are able to put me in possession of any valuable information respecting the movements of the Confederate forces, that punishment would be remitted."

"I have no such information to give you," I told him.

"That time I was quite sure that Jefferson recognized me. I could see it in his eyes. But he only said:

"Precisely. That is the exact lie I expected to tell."

"And then he added:

"Sergeant, take your men outside and leave the prisoner alone with me."

"The men filed out, and the Sergeant followed them and closed the door. As

soon as it was shut, Jefferson got up from the table where he was sitting and gripped me by the hand.

"Arthur," he said, "I haven't seen you these last five years. But I'm not mistaken. You are my brother Arthur, aren't you?"

"I hadn't meant to tell him who I was. You see he'd got to order me to be shot anyway, and it seemed better he shouldn't know he was sentencing his own brother. But it wasn't any use trying to deceive him then. He wouldn't have believed it. So I owned up."

"Yes, Jefferson," I said. "I'm Arthur Langley right enough. I was in hopes you wouldn't recognize me. But you have."

"Then we sat down and talked of many things while the soldiers waited outside."

"He asked me for news of you, and wanted to know if you had forgiven him for running away from home. I told him that you had, and that he must go back to you after the war was over; and he promised that he would. And then we both cursed the war that had brought us together so strangely and so terribly, and poor Jefferson seemed even more distressed than I was by our awful meeting. He broke down and sobbed, poor."

"God knows, Arthur," he said, "I'd let you go right away back to Stuart's camp if I could. But I can't."

"And he couldn't, mother."

"I know you can't do it, Jefferson," I told him. "You men wouldn't let you. If you tried they'd mutiny."

"He allowed that it was more than likely."

"Likely?" I said. "It's a dead certainty. I'd be shot just the same if you tried; and your second in command would put you under arrest, and your Colonel would see that you were shot, too. No, Jefferson, you've got it to do, and you'd best get it done right away."

"The poor boy sat down and covered his face with his hands, sobbing, 'Oh, my God! my God!'

"I tried to calm him a bit, telling him that it was only the fortune of war, and that when I started I knew I was taking my life in my hands. But it didn't seem to comfort him. He kept pacing up and down the room saying, 'I can't do it! I can't do it!'

"But I told him that he must do it—there was no way out of it. Then he made a great effort and calmed himself. He sat down at the table and struck the gong, and then the sergeant came into the room again."

"Sergeant," he said, "the prisoner will be shot at daybreak. For the present you will lock him in the room opposite to mine."

"And they brought me up here and left me."

There was a break in the letter here. Arthur Langley began several sentences, only to strike his pen through them again. But presently he went on thus:

"You will be angry with Jefferson, mother. You will think that I am making excuses for him, and that he might have saved me if he'd liked. Then read on, mother. I have something else to tell you. When you have read it you will never think badly of Jefferson again."

"Two hours ago I heard some one tapping gently at my door, and a voice—it was Jefferson's voice—spoke to me in a whisper.

"Arthur! Arthur!" he said. "Don't answer me, Arthur, or some one may hear you, but listen carefully to what I say."

"I listened, and this was what he said:

"If you put your hand into your wash-hand jug you will find a key that will unlock your door. In the passage you will see a Federal uniform and an overcoat. Put them on and walk right out through the front door, and make straight for the clump of trees to the west. Button your coat well over your face, and you will be mistaken for me. I usually visit the sentries about this time. If you are challenged, imitate my voice and give the password 'Peterburg.' Good-by, Arthur, and God bless you."

"There, mother! you see what Jefferson was willing to do for me. I wonder if you understand why I'm not going to let him do it? It is because I know just what the offer means. It means that Jefferson will be arrested for conniving at my escape and shot instead of me. I mustn't allow that to happen, must I?"

"Jefferson and I weren't as good friends as we should have been in the old times; but I always allowed there was grit in him, and now I know it. I hope there's grit enough in me to stand out against this temptation. It's a temptation to think that there's that uniform waiting for me all the while, and I've only to put it on and get clear away. I wonder."

Once again he stopped writing. The temptation had been a real one; for life is very sweet at two-and-twenty, and it is hard to let it go by merely waiting still and refusing to accept a sacrifice. Moreover, the words which Arthur Langley had just put on paper struck back into his brain, and once more set him thinking. In a sort of delirious fancy he saw himself yielding to the temptation, and putting on that uniform, and walking away safely into the open. It seemed easy and so simple. Fatigue and sleeplessness had broken down his nerves, and an irresistible power impelled him to the action.

"By God!" he whispered hoarsely. "I will do it. I must do it."

He held the letter he had just written over the lamp, and let it burn away to cinders. Then he drew the key from its hiding-place and undid the door, and stepped out silently into the passage.

The promised uniform was in readiness for me all the while, and I've only to put it on and get clear away."

The door of the room opposite, where his brother, the Federal officer, slept, was open. Driven by a sudden impulse, he stepped out to it on tiptoe, and looked in. Jefferson Langley was sleeping quietly, with the moon shining through the window on his handsome, boyish face, and making a glitter on his golden hair. His sleep was the calm and peaceful sleep of one who has done his duty, and has no more care upon his mind.

Arthur Langley stood as it were spell-bound, and gazed at him. The infinite peacefulness of the face at first perplexed him. But presently he grew to understand it; and a great shame for his own contemplated cowardice stole over him. Gradually his muscles relaxed. Silently, and without a word, he gathered up the uniform and carried it to a spot where it might lie without exciting any one's suspicion. Having done this he crept back to his room and locked himself in again, and hid the key where none were likely to discover it.

Then, feeling a great weight lifted from his mind, he threw himself down upon the bed, and slept dreamlessly, like his brother, till the dawn.

POPULAR SCIENCE NOTES.

TO TAKE THE PLACE OF LEATHER.—A new material is proposed as a substitute for leather. It is called "fexus fibra," and is derived from flax, suitably prepared and oiled. It has the same appearance as leather, is particularly supple, and takes a polish equally well with the best kinds of calf. The material is said to possess great tenacity, while affording great ease and comfort to the foot when made into shoes. Fexus fibra, being of vegetable origin, is calculated also to facilitate free ventilation, and thereby to obviate the discomfort arising from what is called "drawing" of the feet.

THE INTER-RELATION OF FORCES.—Water freezes and becomes ice at 32 degrees of Fahrenheit, whereas mercury freezes at 39 degrees below zero of Fahrenheit; olive oil, on the contrary, shows signs of congelation at from 40 to 45 degrees of Fahrenheit. The three substances quoted being all liquids the difference in the loss of heat requisite to bring them to solidification is very great indeed. The action of heat on fluids or solids is equally various. Water boils at 212 degrees Fahrenheit, lead melts at 612 degrees; the fusing point of gold is 2,016 degrees, and of iron 3,000 degrees.

WE'VE THE PARADE.—Writing from Chicago, a World's Fair correspondent of the New York Tablet says:

The first of objects of interest to which I was attracted were the Caravels of Columbus. It is needless to say that these three Fifteenth century ships were built and fitted out at the expense of the Spanish Government. They are stationed in the little stretch of water that lies between the Convent of La Rabida and the Casino Hall. They were built in accordance with all the data regarding the original craft it was possible to obtain. The largest, the Santa Maria, is the one open to inspection. Upon her mast is tacked a card from which I obtained her dimensions.

At the water line she is a little more than 71 English feet, her beam not quite 26 feet, and the hold 22 feet deep. The rear and forward are 24 feet wide. At the forward and the bow and sides rise well up, over this flooring on which her sailors had a little free space. At the rear is the cabin of the admiral, over which a smaller deck hangs, out and back of the rudder, a regular poop. If this tiny vessel be contrasted with some of our modern Atlantic steamers, the grandeur of Columbus' deed assumes proportions that are simply beyond the power of words to say. When I looked at the narrow space where I suppose those hardy men came to their chief a few days before the voyage ended and forced from him the promise to return if land came not to view within three days, in very truth my heart went out to them. Surely, that those fifty odd men should have been cooped up in that little ship for two long months was a species of confinement whose weariness is almost beyond the compass of imagination. You may somewhat fancy the weariness of such imprisonment when you recall the historical fact that they did not encounter even a storm to break the monotony of their cheerless voyage. It was sky above and sea below, and over an east wind filling their sails. Yet they were cooped up in a narrow little space, confined by the walls of their tiny ship. No wonder the varying of the needs awakened such fears in minds already filled with fears! The caravel Santa Maria has come to the World's Fair after having taken part in the ceremonies and festivities which were held at Palos on the 2d of August and the 12th of October, 1892. Built in Cadiz her keel was laid on the 21st of April. She was launched on June 26th, and on the 29th of July went to sea bound for the port of Palos to take part in the festivities referred to above. Some ancient relics are displayed on her deck. Some of those old time lombards with small stout iron hoops around the barrel are to be seen and hanging in nets near them the round stone shot with which they were loaded. The sides of the vessel are hung with the arms of the soldiers and sailors—pikes, battle-axes, arquebuses, shields, bows and arrows. Before the pilot's wheel is a compass, which a card informed me was an exact reproduction of those drawn on the charts of Juan de la Costa, pilot of the Santa Maria. On the that deck is the cabin of the Admiral. A little room—in truth the only part of the caravel that has any semblance to a room—about 15 feet deep and 12 feet wide, its front board up ornamented with gothic arches, one door and three windows—this is the place where the admiral now resides, while the Schuykill district has been depleted of one-fifteenth only of its total store. The quantity termed "mined" includes the 40 per cent.

The full significance of these figures does not appear until they are made to exhibit the total available, remaining supply in the three great anthracite districts. There remain in the Wyoming district four and one-half times the amount already mined, and in the Lehigh district but two and one-half times the amount now mined, while the Schuykill district has been depleted of one-fifteenth only of its total store. The quantity termed "mined" includes the 40 per cent. available soft-coal supply on the other, there is no reason to believe that the latter would not be quite finely expressed in terms of the former. Some really startling results were recently set forth by the Pennsylvania commission appointed to investigate the matter of waste in anthracite coal mining. In the first place, it was shown that in the past not more than 80 per cent. of the actual coal in the ground has been obtained for the market by mining operations. The committee believes that this percentage may be increased to 90 per cent. by the year 1900. The full significance of these figures does not appear until they are made to exhibit the total available, remaining supply in the three great anthracite districts. There remain in the Wyoming district four and one-half times the amount already mined, and in the Lehigh district but two and one-half times the amount now mined, while the Schuykill district has been depleted of one-fifteenth only of its total store. The quantity termed "mined" includes the 40 per cent. available soft-coal supply on the other, there is no reason to believe that the latter would not be quite finely expressed in terms of the former. Some really startling results were recently set forth by the Pennsylvania commission appointed to investigate the matter of waste in anthracite coal mining. In the first place, it was shown that in the past not more than 80 per cent. of the actual coal in the ground has been obtained for the market by mining operations. The committee believes that this percentage may be increased to 90 per cent. by the year 1900.

THE ORDINARY THERMOMETER.—Ordinary thermometers are generally defective, says a scientific writer, because of slovenly work in making them; the testing, pointing and sealing being carelessly done. Tests should only be made by comparison with a standard thermometer, placed with the instrument to be tested under water. But in the cheap shop the water is often allowed to get cool, and is then suddenly warmed by an addition of hot water. The testing accordingly is inaccurate. In these shops also the zero point is determined simply by placing the bulb in snow, and when the mercury has become stationary the thumb is placed on the point where this is shown and a file makes the mark. The initial point is usually thus misplaced from a sixteenth to an eighth of an inch, and the whole scale is rendered wrong. Thermometers with metallic plates are sometimes incorrect. The degrees on them are marked by means of dies, which cause a warping or curling of the plates. These have to be rolled to flatten them again, and this causes an increase in the size of the plates and the degrees. Allowance is sometimes made for this in making the dies, but the result is usually unsatisfactory. A further source of error is in the fact that most of them are tested at one point. The manufacturer relies on a scale of degrees that is very nearly correct, and uses it for all instruments having a bulb of like size. The result is that the thermometers are in error at certain points. It is for this reason also that glass thermometers, which have degrees marked upon the glass with type, are apt to be incorrect. The type used is the same for all glass of similar kind, notwithstanding that the bulbs may vary in size. Scientific thermometers are usually tested as to their accuracy before they are used at some authoritative observatory. In England this is done at the government station at Kew; in this country at the physical laboratory at Yale and Harvard Universities, and at the Smithsonian Institution. Certificates are granted showing the accuracy of each thermometer.

THE VARIETIES OF WOODPECKERS.—The imperial woodpecker is an exaggeration of the ordinary red-headed woodpecker. It is nearly two feet long, its plumage black and white, with a gorgeous scarlet crest, its bill white. It lives in Mexico and in the Sierra Madre mountains. These birds are always found in pairs and are destroyers of trees, as they devote their entire energies to one tree for as long as a fortnight, injuring it so greatly that the tree dies. In Europe and Asia there is a gray-headed woodpecker. The largest European woodpecker is seventeen inches long, black, with scarlet crest. It is called the great black woodpecker. The little brown woodpecker of Ceylon is not five inches long. The white-headed woodpecker is a wise looking little creature that lives in the pine woods of the Pacific coast. There are some 250 species of woodpeckers, and they inhabit almost every part of the globe. —[Chicago Daily News.]

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