sinking on the ground beneath a tree, she burst into sobbing. Roger, scarlet, with sparkling eyes, dropped on one knee beside her.

"Daphne, I'm a ruffian! forgive me! You must, Daphne! Look here, I want you to marry me. I've nothing to offer you, of course; I'm a poor man, and you've all this horrible money! But I'll make you a good husband, Daphne, that I'll swear. If you'll take me, you shall never be sorry for it."

He looked at her again, sorely embarrassed, and hating himself. Her small frame shook with weeping. And presently she turned from him, and said in a fierce voice:

"Go and tell all that to Elsie Maddison."

Infinitely relieved, Roger gave a quick, excited laugh.

"She'd soon send me about my business! I should be a day too late for the fair, in *that* quarter. What do you think she and I have been talking about all this time, Daphne?"

"I don't care," said Daphne hastily, with face still averted.

"I'm going to tell you, all the same," said Roger triumphantly; and diving into his coat pocket, he produced "my tutor's" letter. Daphne sat immovable, and he had to read it aloud himself. It contained the rapturous account of Herbert French's engagement to Miss Maddison, a happy event which had taken place in England during the Eton holidays, about a month before this date.

"There!" cried the young man, as he finished it. "And she's talked about nothing all the time, nothing at all — but old Herbert — and how good he is — and how good-looking, and the Lord knows what! I got precious sick of it, though I think he's a trump, too. Oh, Daphne! you were a little fool!"

"All the same you have behaved abominably!" Daphne said, still choking.

"No, I haven't," was Roger's firm reply. "It was you who were so cross. I couldn't tell you anything. I say! you do know how to stick pins into people."

But he took up her hand, and kissed it as he spoke.

Daphne allowed it. Her breast heaved as the storm departed. And she looked so charming, so soft, so desirable, as she sat there in her white dress, with her great tear-washed eyes and fluttering breath, that the youth was really touched and carried off his feet; and the rest of his task was quite easy. All the familiar things that had to be said were said, and with all the proper emphasis and spirit. He played his part; the spring woods played theirs; and Daphne, worn out by emotion, and conquered by passion, gradually betrayed herself wholly. And so much at least may be said to the man's credit, that there were certainly moments in the half-hour between them when, amid the rush of talk, laughter, and caresses, that conscience which he owed so greatly to the exertions of "my tutor" pricked him not a little.

After losing themselves deliberately in the woods, they strolled back to join the rest of the party. The sounds of conversation were already audible through the trees in front of them, when they saw Mrs. Verrier coming towards them. She was walking alone, and did not perceive them. Her eyes were raised and fixed, as though on some sight in front of them. The bitterness, the anguish one might almost call it, of her expression, the horror in the eyes, as of one ghost-led, ghost-driven, drew an exclamation from Roger.

"There's Mrs. Verrier! Why, how ill she looks!"

Daphne paused, gazed, and shrank. She drew him aside through the trees.

"Let's go another way. Madeleine's often strange." And with a superstitious pang she wished that Madeleine Verrier's face had not been the first to meet her in this hour of her betrothal.

IDEALS

BY WINIFRED WEBB

WATCH well the building of thy dream!
However hopeless it may seem,
The time will come when it shall be
A prison or a home for thee.

AN AUDIENCE WITH ABRAHAM LINCOLN

BY T. B. BANCROFT

IT was at the time when the Army of the Potomac, under McClellan, was lying at Yorktown, that my friend John conceived the idea of visiting his son, who was a private in the 3d Pennsylvania Cavalry and in camp on the Peninsula. John was a modest man and felt timid about the difficulties that he might encounter in getting permission to visit McClellan's camp; and in his perplexity he asked me to go with him. To this I finally consented, and by consenting I was brought for the space of an hour face to face with the immortal President.

At that time almost every county in the North had its provost marshal and his guard. They looked up deserters and attended to bounty jumpers, enlistments, etc., and, thinking it might be a good thing to have, I got from our marshal a certificate, stating that John and I were good, loyal citizens and entitled to all the rights and privileges of such. Armed with this document, we set out for Washington, where we arrived on the evening of the same day.

The following morning we called at the War Department, were allowed to state our case briefly, and were very expeditiously thrust out again, with an overwhelming conviction that nothing short of our own enlistment would enable us to see the boy, or get anywhere near the Army of the Potomac.

As we left the War Department and walked down the street, we were very near deciding to take the next train for home, when it occurred to us to go to the White House and lay the case before the President. This was a common custom, and, although we were not aware of it at the time, Mr. Lincoln had set apart an hour or two twice each week for meeting the public, and this day happened to be one of those selected by him. Sometimes people spent weeks in Washington before they were able to put their cases before him, but, as will be seen, we were more fortunate.

To the White House we went, passed the single sentry on guard at the front entrance, and going in, proceeded to the "Blue Room," where we sat down among some fifty others, all bent on similar missions. After about half an hour, a colored servant came down the stairs and announced that the President was ready to receive, whereupon the whole crowd rushed tumultuously upstairs and crowded into the little office, filling every available seat. The crowd behind pushed John and myself forward and forced us up against the railing protecting the desk, behind which and within three feet of us, sat Abraham Lincoln. For more than an hour I stood there and studied his face and listened to the conversations between him and the petitioners who came to offer their cases for his patient hearing and final decision. The railing at which I stood ran almost across the room, with a gate at one end, through which the applicants were admitted, one at a time. Mr. Lincoln sat at the back end of the enclosure, and his secretary at the end nearest the gate. Between them stood a chair in which the applicant sat while his case was under consideration. Except for the guard at the front door, I had seen no evidence of any special care being taken for the President's protection, and it seemed to me that it would be easy for any one to get in with the throng, assassinate him while presenting papers to him, and escape in the confusion. The latter part of this narrative will show how greatly I was in error as to the measures taken for his safety.

The President had just come from a cabinet meeting and looked worn and wearied. His hair stood up all over his head as though he had been running his hands through it, and in this respect he looked not unlike the pictures of Andrew Jackson that we often see — homely of face, large-boned, angular, and loosely put together. His appearance almost justified the gibes and jeers with which his enemies were accustomed to describe him — all but his eyes; here his soul looked forth,— clear, calm, and honest, yet piercing and searching; not to be deceived, yet practising no guile.

There was a manhood in his look
No murderer could kill.

McClure's Magazine 11/08 - 4/09; 32:

cover the lower part of his face, and the expression of the upper part was one of pathetic sadness — then you saw the burden and the care that were laid upon him; reverse the process and look upon the lower half of his face, and the expression was humorous and kindly. He sat in his chair loungingly, giving no evidence of his unusual height; a pair of short-shanked gold spectacles sat low down upon his nose, the shanks catching his temples, and he could easily look over them if he so desired. As I came up to the railing in front of him, he was reading a paper that had just been presented to him by a man who sat in the chair opposite him and who seemed, by his restlessness and his unsteady eyes, to be of a nervous disposition, or under great excitement.

Mr. Lincoln, still holding the paper up and without movement of any kind, paused and, raising his eyes, looked for a long time at this man's face and seemed to be looking down into his very soul. Then, resuming his reading for a few moments, he again paused and cast the same piercing look upon his visitor.

Suddenly, without warning, he dropped the paper and stretching out his long arm he pointed his finger directly in the face of his vis-à-vis and said, "What's the matter with you?"

The man stammered and finally replied, "Nothing."

"Yes, there is," said Lincoln. "You can't look me in the face! You have not looked me in the face since you sat there! Even now you are looking out that window and cannot look me in the eye!"

Then, flinging the paper in the man's lap, he cried, "Take it back! There is something wrong about this! I will have nothing to do with it!" — and the discomfited individual retired. I have often regretted that I was unable to discover the nature of this case.

Next came before him a young man whose brother had been in the army and had been taken prisoner, but had managed to escape. Instead of going to the first proper officer he met and reporting himself for duty, he went to his home in the North, and there was arrested by the provost guard and sent back to his regiment, where he was tried for desertion, found guilty, and sentenced to death.

His brother, seeking his pardon, had been to the War Department without effect and came to the President as a last resource. Mr. Lincoln took his papers (which consisted of statements and suggestions endorsed by many adjutants and officers, from his corps commander down to his captain), read the whole mass over slowly, then, taking up the last one and reading from the endorsements on the back, said slowly, "Hm — hm — hm —— 'Approved and respectfully forwarded with the suggestion that if the said J. L. will re-enlist for three years or during the war, a pardon be granted. — Signed, Gen'l A——, John Doe, Adjutant.'

"I don't know but what I agree with General A——, and if the young man will re-enlist for three years or during the war, I will pardon him."

To this the brother very promptly agreed, whereupon Mr. Lincoln (who had been sunk down in his big chair up to this time) began to rise, and as I looked, he went up and up and up until I began to think he would reach the ceiling; but presently he bent over and reached to a pigeon-hole in the desk before him, took out a card, wrote upon it, and signing it "A. Lincoln," gave it to the brother, saying, "Take that to the War Department, and I guess it will be all right"; and, with his brother's pardon assured him, the young man, smiling all over, left the room.

The next comer was an Irishman of perhaps sixty years, who was employed as night watchman in Washington, and on account of his health desired to get a position as day watchman in the Treasury. Unfortunately, he had nothing in writing to show, and Mr. Lincoln had said that he would not listen to verbal petitions, but must have something in the nature of a brief that he could read, and thus become conversant with the main points in the matter presented to him.

As he seated himself, Mr. Lincoln turned to him and said, "My friend, what can I do for you?"

"Well, yoir Excellency, I am a night watchman at Mr. Gardner's in the city, and I do be sick all the time, and I think 'tis the night work that doesn't agree with me, and I was thinking if your Excellency could give me a job in the Treasury ——"

"Stop! Stop!" cried Lincoln. "Have you any brief to show me?"

"Fwat's that?" said Michael.

"Give me something I can read," said Lincoln. "Have you nothing in writing to show me?"

"Sir," says Michael, diving into his breast pocket and bringing up two worn and torn envelops whose thickness showed no lack of reading matter, "I have two letters from me byes in the army," at the same time thrusting them into the President's hands.

Lincoln looked at them, but did not venture to open them, and forced them back upon the reluctant Michael, saying, "Tut, tut, I haven't time to read a book." Michael returned to the charge and with many "Your Excellency's" pressed his case so fluently and so rapidly that the President found no chance whatever to take part in the conversation for some time, until Michael, from want of breath or argument, paused.

Then Lincoln, "My friend, I don't know you, nor do I know that I ever saw you. I cannot put you in the Treasury without some reference. Suppose that I should put you there and you should prove to be a thief and should steal the money ——"

"Sir," interrupted the indignant Michael, "I'm an honest man."

"I believe you are," said Lincoln, "but I know nothing about you. Do you not know some one in the city that I also know and who can speak for you?"

"Well, your Excellency, I know Mr. Graham, beyont on C Street, and Mr. Brown and Mr. Jones and Mr. Robinson and Mr. Swayne, the sculptor, and ——"

"Stop!" cried Lincoln, "I know Mr. Swayne, and if you will bring me a letter from him, stating what he knows about you, I will see what can be done for you."

Exit Michael, trying to get his boys' letters back again into the pocket they came from.

And now a boy in army blue takes the vacant chair and handing his papers to Mr. Lincoln sits silently waiting their perusal. Having read the packet, the President turns to him and says, "And you want to be a captain?"

Boy — "Yes, sir."

Lincoln — "And what do you want to be captain of? Have you got a company?"

Boy — "No, sir, but my officers told me that I could get a captain's commission if I were to present my case to you."

Lincoln — "My boy,— excuse my calling you a boy,— how old are you?"

Boy — "Sixteen."

Lincoln — "Yes, you are a boy, and from what your officers say of you, a worthy boy and a good soldier, but commissions as captains are generally given by the governors of the States."

Boy — "My officers said *you* could give me a commission."

Lincoln — "And so I could, but to be a captain you should have a company or something to be captain of. You know a man is not a husband until he gets a wife — neither is a woman a wife until she gets a husband. I might give you a commission as captain and send you back to the Army of the Potomac, where you would have nothing to be captain of, and you would be like a loose horse down there with nothing to do and no one having any use for you."

At this point the boy who had come to Washington full of hope, finding his castle toppling about his head, broke down, and his eyes filled with tears. Whereupon Mr. Lincoln, putting his hand affectionately upon his shoulder and patting him while he spoke, said, "My son, go back to the army, continue to do your duty as you find it to do, and, with the zeal you have hitherto shown, you will not have to ask for promotion, it will seek *you*. I may say that had we more like you in the army, my hopes of the successful outcome of this war would be far stronger than they are at present. Shake hands with me, and go back the little man and brave soldier that you came."

And now came the writer's turn; and, remembering the tribulations of Michael, I pulled out my provost marshal's certificate and presented it as an introduction. Mr. Lincoln read it and handing it back to me said, "And what can I do for you?"

I told him of our desire to go through to the Army of the Potomac, and he asked, "Have you applied to the War Department?" and being answered affirmatively, he replied, "Well, I must refuse you for the same reason that the War Department did. If we were to allow all to go through that wish to do so, we would not have boats enough to carry them. They would get down there and be in the way, and" (looking me over) "I judge by your appearance you know what it means to have people in the way." At this somewhat equivocal dismissal, I shook his hand and went out.

Ruminating on the annoyance that came to him from people who, like myself, took up his time mainly for the opportunity of seeing him, and reflecting that his kindly heart prompted him, in addition to his other burdens, to devote two hours twice a week to listening to the common people, who could thus reach him without influence, I marveled at the simple greatness of the man, and the kindly, gentle patience with which he listened to each one, always smoothing over a refusal that his duty imposed upon him, or, by advice or counsel, mitigating the blow that he had to deal. I passed the sentinel at the door, and when next I saw Lincoln, it was as he lay dead in his coffin under the dome of the Cradle of Liberty, Independence Hall in Philadelphia.

On leaving the White House, my friend John went to our hotel, while I walked over to the Long Bridge, intending to go out upon it for the view up and down the river; but as I approached it, a sentry stepped out and, halting me, asked for my pass allowing me to go

across the bridge. When I told him that I had no pass, he blocked my way, and refused to let me go any farther.

Next morning we went to the depot to take the train home. I bought my ticket, and was hastening to the cars, when I was stopped by a man whom, from his appearance, I took to be a well-to-do farmer. He asked if I lived in the city.

I replied "Yes," but recollecting that I was in Washington and not in Philadelphia, I amended my answer by substituting "No." He then asked me my name, which I gave him, and went on to inquire what my business was. At this question, I took umbrage, and retorted, "What business of *yours* is it what *my* business is?" Upon which he turned up the lapel of his coat and exposed the badge of a government detective.

Like Crockett's coon, I came down and told him to ask his questions and ask them quickly, so that I might not miss my train. He soon got through, and when I was satisfied that I was all right (my provost marshal's certificate came in nicely here), I asked him why he had stopped me. He said, "You and a companion came to Washington the day before yesterday. You both stopped at the National Hotel, and yesterday you were at the War Department, endeavoring to get through to the Army of the Potomac; being refused there, you went to the White House and tried to get Mr. Lincoln to pass you through; being unsuccessful with him, you were next found trying to cross the Long Bridge ——"

Here I interrupted him by asking what he took me for, to which he replied, "I took you for a blockade runner."

I managed to catch the train by running for it, and once seated, with the great dome of the Capitol fast receding from view, I bethought me that, after all, a single sentry at the door of the White House was perhaps sufficient for the protection of the President, and that possibly all who attended the semi-weekly public receptions were not suppliants by any means.

THE ORIGIN OF LIFE ON THIS PLANET

HOW THE HYPOTHESIS OF PANSPERMY ACCOUNTS FOR IT

BY

WALDEMAR KAEMPFFERT

SOMEWHERE in the vast depths of space, wheeling about a sun so ineffably distant that its light touches the earth only after the lapse of millenniums, imagine a planet that has at last reached a stage in its age-long development when its outer gaseous casing has chilled into a crust, and when that cool crust has gathered to itself oceans of water and a great sea of air, — in a word, a planet that has so far ripened that, given a single living reproductive unit, it will cease to be a revolving, inert, spherical mass, and blossom forth a green, living world. Millions of years ago, how many we cannot even roughly determine, our earth must have been such a planet — a world hungering for life. Whence came the primeval living unit that changed its aspect and fulfilled its destiny? Clearly, either that unit must have been spontaneously generated by some occult process from the earth's own lifeless self, or it must have bridged the shoreless gulf that separates the earth from some neighboring and living world.

If there is one theory abhorred by the modern biologist above all others, it is that of the spontaneous generation of life. Lord Kelvin, perhaps the greatest physicist of his time, laid it down as an immutable law that lifeless matter cannot be transformed into living matter without the aid of a living substance, and to that authoritative dictum every follower of Darwin will cheerfully assent. Yet, hardly a year passes but some biological enthusiast announces that he has at last discovered the secret of spontaneous generation. Not so long ago, when the bewildering phenomena of radium were the chief topic of scientific discussion, Dr. Burke asserted that radium had the wonderful property of imbuing gelatine solutions with life. Sir William Ramsay, the brilliant English chemist, promptly demolished the claim

and placed the discovery where it properly belonged — in the domain of chemistry. More recently a French scientist, Stephane Leduc, produced what he called artificial cells and plants by means of a solution of cane sugar, copper sulphate, and potassium ferrocyanide. But his miniature "plants" are no more like actual plants than paper flowers are like real flowers.

If spontaneous generation is impossible, the primal unit from which all terrestrial life evolved must have journeyed hither from some other world — an alternative conception which seems more like a poetic rhapsody than a sober scientific reflection. It is as old as mankind, this notion of the transmission of life from star to star, but it has remained for a very distinguished Swedish physicist, Professor Svante Arrhenius, to place "panspermy" — the name with which he has christened the alternative theory — upon the sure footing of a satisfactory physical and mathematical exposition.

The First Germ Carried Billions of Miles by Light-Pressure

Given the primal unit of living matter that is to be transplanted to a waiting globe, what propelling machinery is sufficiently powerful to wrench it from the clutch of planetary gravitation and convey it through the infinite wastes of the universe? Assuming that the hypothetical unit were propelled from the earth at a speed of sixty miles an hour (the speed of an express train), it would reach Mars only after sixty-seven years, and Alpha Centauri, the nearest fixed star, in 42,920 million years. Evidently a motive force more efficient than that of a steam locomotive must be provided, a force not only able to break the relentless grip of gravitation, but also able to impart to the living unit a velocity so great that the unit may not die of old age before arriving at its goal. That terrific, overwhelming force Arrhenius has found in the pressure of light.

To the man who has not closely followed the wonderful investigations that have been made by the physicist of late years, and who knows little of the newer conceptions of matter and energy, the assertion that a moonbeam, a luminous nothing, a shaft of diaphanous immateriality, actually presses upon the waters and the fields of the earth with a force that is calculable, must seem superbly fantastic. Yet a Russian, Lebedev, and two Americans, Nichols and Hull, have carefully measured the light pressure exerted on this earth and have ascertained, not only that it is appreciable, but that on the entire terrestrial surface it amounts to the respectable total of seventy-five thousand tons.

To Arrhenius we owe the theoretical explanation of the cosmical effect of radiation pressure. He has taught us not to expect startling results when light impinges on very large bodies. No one has ever seen an elephant lifted off his feet and tossed into space by mere light. But when we calculate the impact of light on exceedingly small masses, and the relation between light pressure and weight (gravitational pull), the mechanical possibilities of a shimmering ray become stupendous. Pressure acts superficially; it is proportional in amount to the surface upon which it is applied. On the other hand, weight or gravitation affects the entire mass. That distinction is most important, as we shall see if we take a concrete example.

How Light May Move a Cannon Ball

Consider the case of a cannon ball weighing one thousand pounds. Divide that ball into ten balls of one hundred pounds each. The total weight still remains the same; but the surface of the ten balls is greater than the surface of the original ball. In other words, a greater area is presented to the pressure of light. If this process of subdivision be continued until many little balls no larger than buckshot are produced, an enormous superficial area is obtained. Yet the total weight still remains the same. While the gravitational pull on the entire mass of little balls remains proportionally unchanged, the effect of radiation pressure is proportionally increased. Arrhenius has computed that by minute subdivision a point is finally reached where the balls obtained are so small that the light pressure exactly counterbalances the pull of gravitation. In other words, the globules obtained will remain suspended wherever they may happen to be placed — pulled by solar gravitation and pushed by light with equal strength in opposite directions, perfectly balanced in the great scales of cosmic forces.

A painstaking German mathematician named Schwarzschild has applied his mathematical calipers to these globules and has found that if the pressure of sunlight is to overcome the gravitational pull of the sun so as to thrust the globules into space, they must be invisibly small. Figures beyond a certain point convey so little to the mind that only with some trepidation may we set down the exceeding littleness of these particles. Laid side by side, 62,976,000,000 measure an inch. In a vessel of exactly one cubic inch capacity, approximately 7,700,000,000,000 such particles can be