

THE MAGAZINES.

THE JUNE ATLANTIC opens with a poem by Aldrich, and closes with one by Lowell, which we reproduce elsewhere. Robert Dale Owen tells a remarkable piece of secret history under the title "Political Results from the Varioloid." President Eliot, of Harvard, has an article on "Wise and Unwise Economy in Schools," and there are narrative papers, on "The California Ranch," by Stephen Powers; another on the "Cruise of the Rappahannock in Calais Harbor;" and an amusing number of Mark Twain's "Old Times on the Mississippi." Henry James, Jr.'s novel, "Roderick Hudson," grows in interest. And there are shorter stories by Mrs. Launt Thompson ("Benjamin Jacques"), and one called "Boring for Oil." Besides the two poems named above, there are others by Celia Thaxter, Mrs. Piatt, Edgar Fawcett, and Mrs. Moulton. The editorial departments of Recent Literature, Art, Music and Education are increased by one on the Drama, containing a notice by the Editor of Mr. Raymond as Colonel Sellers.

ST. NICHOLAS FOR JUNE. Opens with one of the most charming frontispieces that have yet appeared in the magazine, illustrating a fanciful poem by Rachel Pomeroy, about a little giant-girl, who is certainly unlike any other of her race with whom we are acquainted.

Stories of adventure have by this time come to be a fixed fact with the boys who read ST. NICHOLAS, and they will fully appreciate those of this number. The poem of "The Fays"—beautiful in itself—is illustrated most exquisitely by Jessie Curtis, who has no superior in the dainty and graceful execution of drawings of this delicate order. The illustrations generally are admirably drawn and engraved; and the various departments are, as usual, full of information, anecdote, and humor.

SCRIBNER FOR JUNE contains an admirable story by James T. McKay, "Birds of Mapleton." Albert Rhode's description of "The Latin Quarter" gives a pretty good idea of a certain phase of Parisian Bohemianism. Col. Waring's paper on Dutch Farming appeals forcibly to the agricultural districts. Mr. A. B. Johnson, secretary of the late Mr. Sumner, tells some characteristic anecdotes about the Senator. As for Mr. Cook's household paper, with its tasteful and pretty illustrations, this is one of the most amusing and interesting papers in the number. There is a generous installment of "The Mysterious Island," which the Editors seem to be boiling down to the very last point. Mr. Munger's article on "Maxims" presents views on the subject which will be new to many readers. The most striking poetic feature of the number is "The Power of Prayer," a darkly dialect poem by Sidney and Clifford Lanier. Dr. Holland discusses "Instruction from Outside," "The Shrinkage of Values," and "The Music of the Church." The Old Cabinet contains "Some Suggestions Concerning the Art of Conversation." The new department of "The World's Work" is quite full.

THE JUNE number of LIPPINCOTT'S has the concluding paper descriptive of a trip "Up the Parana and in Paraguay." It is well written and finely illustrated. C. Grenville Murray gives a vivid and touching description of the way Henri Derbly, a sensitive French boy, became a soldier during the days of the Conscription. "The Symphony," by Sidney Lanier, is a poem far above the ordinary level of even our best magazine poetry. Wirt Sikes gives a free and very readable account of the French Blousards at their mask balls and various places of questionable resort. "Eight Hundred Miles in an Ambulance," by Laura Winthrop Johnson, is a pleasing description of a wagon-ride across our western prairies. Robert Wilson contributes a vivid sketch of a storm at sea. Sarah B. Wister tells us how a person without art-education is apt to feel in visiting the great art-galleries of Europe. "By the Lake" is a short love-story, by Ita Aniol Prokop. T. Adolphus Trollope contributes a paper on "A Scene in the Campagna." "Three Feathers," by William Black, reaches a happy conclusion.

Titus Munson Coan is making a reputation as a magazine writer. In his Complaint of Printing, in the June number of the GALAXY, he says some very smart, quaint, and true things about newspapers. Another readable paper in this number is "The Murats of Florida," giving an account of the American life of Achille, eldest son of King Murat, and fuller particulars about his amiable princess. Richard Grant White has another of his acute, but poorly written papers on the Science and the Philosophy of Music. Every thing that R. G. White writes is worth reading. The serials of the number are capital—"Dear Lady Disdain," by Justin McCarthy and "Leah," by Mrs. Annie Edwards. Drift Wood is, as usual, clever and entertaining, while the Current Literature, Scientific Miscellany, and Nebulae are in the best vein of this popular Monthly.

THE CANADIAN MONTHLY for May has an article on the late Hon. Joseph Howe. Unfortunately it is not concluded. We think that a pity, as anecdotal person prominent men should be compressed within the limits of a magazine paper. An article on Imperial and Colonial Confederation is noticed more at length in our editorial columns. The whole number is very creditable, indeed, and we are pleased to find that the article on Current Events has been curtailed. We can only repeat that this national magazine of ours should be generously supported, and along with the CANADIAN ILLUSTRATED NEWS ought to be in every Canadian home.

Canadian students of science cannot do better than receive the POPULAR SCIENCE MONTHLY of the Appletons. It is a distinctive publication, admirably edited and printed, every number of which is stored with rich material. The June number contains Toadstools and their Kindred, an illustrated paper of rare merit. The Conservative Design of Organic Disease is another useful and acute article. The Microscope and its Misinterpretations should be read by all students of Physics. Max Muller has a curious question of Horses' Ribs. The Geographical work of 1874 is an admirable summary, while Woods' Discoveries at Ephesus are very entertaining. The Miscellany and Notes would fill a small magazine by themselves.

HYPNOLOGY.

Frank Buckland, the naturalist, writes:—  
The human frame cannot do without sleep. I believe the reason is that the mysterious property—for want of a better name we call it "vital energy"—gradually leaks out during the day. During sleep the machinery of the body, especially the brain, becomes recharged with it. The cause of not being able to sleep—I write now of people in good health and hard workers with their brains is that the brain cannot, so to speak "go down," but it continues to act, more or less. My father when writing the "Bridge-water Treatise," had his own way of working. He was an excessively busy man during the day, and had only the night hours in which he could write. He generally dined at 7 o'clock, and immediately after dinner went to sleep for two or three hours. He then got up and worked on until 2 or 3 o'clock in the morning. Just before retiring he took some light pudding or a sandwich, with cocoa or milk. Thus he always slept well, as the blood was diverted from the brain to the stomach.

I have no hesitation in saying that the proper thing to do is to go to sleep immediately (or at least very soon) after the meal of the day. All animals always go to sleep, if they are not disturbed, after eating. This is especially noticeable in dogs, and the great John Hunter showed by an experiment that digestion went on during sleep more than when the animal was awake and going about. This is his experiment: He took two dogs and gave them both the same quantity of food. One of them was then allowed to go to sleep; the other was taken out hunting. At the end of three or four hours he killed both these dogs. The food in the stomach of the dog which had been asleep was quite digested; in that of the one which had been hunting the food was not digested at all.

This fact, I think, shows the advisability of going to sleep immediately after eating. This ignored fact always occurs to my memory when I see old gentlemen nodding over their wine. Nature says to them "Go to bed." They will not go to bed, but still nature will not allow her law to be broken, so she sends them to sleep sitting in the chairs. People, therefore, who feel sleepy after dinner ought to dine late, and go straight to bed when a sleepy feeling comes over them.

Most good folks, however, do the worst possible thing imaginable; they retire altogether into the drawing room, and then, to make matters worse, they drink tea and coffee. Now I regard tea and coffee, when taken at night, to be poison to certain constitutions. It is very well in the morning, but it is very bad at night. The reason why tea and coffee should not be taken at night is that the one contains an alkaloid called theine, and the other contains an alkaloid called caffeine. These two alkaloids taken into the system stimulate the brain, and do not allow it to go to rest. I speak of this matter from experience. If I take thoughtlessly a cup of tea or coffee after 5 o'clock in the evening, going to bed about 11 o'clock, I cannot go to sleep; and if the brain does fall asleep, the alkaloid will wake it up in about an hour or two. Sleeplessness, therefore, is usually caused by tea or coffee, though, strange to say, tea and coffee actually send some people into sound slumber.

I well recollect the late Dr. Wilberforce, then Bishop of Oxford, telling my father, then most actively engaged as Dean of Westminster, of his patient way of going to sleep. It is better than the old-fashioned prescription of watching sheep jumping through a hedge one after another, ships sailing out to sea, &c. The Bishop's prescription was to repeat very slowly the vowels A E I O. In doing this, they were to be faintly pronounced with each inspiration and expiration. It will be found easy to do this without moving the lips, but the vowel U must not be pronounced, for to do this the muscular action of the lips necessarily takes place, and sleep comes not. I advise my readers to try this plan.

I once heard a midshipman who complained that he could not sleep at night because there were no waves dashing against the sides of the ship. To this noise he had so many months been accustomed that he could not sleep without the familiar sound. He asked his mother to dash pails of water against his bedroom door till he went to sleep. I was once told, when on a salmon inspection, that a certain miller could sleep so long as the continued whirr of the mill wheel was going on, but directly after the noise stopped he awoke.

The deepest sleep is always just before dawn. It is, I believe, probable that some change takes place at this time in the atmospheric condition, as the hour just before dawn is selected by

savages to make their attack, and it is at this time also, I believe, that a great proportion of children are born. I venture to suggest a new but simple remedy for want of sleep. Opiates in any form, even the liquor opii sedat., and chloroform, will leave traces of their influence the next morning. I therefore prescribe for myself—and have frequently done so for others—onions; simply common onion raw, but Spanish onions stewed will do. Everybody knows the taste of onions; this is due to a peculiar essential oil contained in this most valuable and healthy root. This oil has, I am sure, highly soporific powers. In my own case they never fail. If I am much pressed with work, and feel I shall not sleep, I eat two or three small onions, and the effect is magical. Onions are also excellent things to eat when much exposed to intense cold. Mr. Parnaby, Troutdale Fishery, Keawick, informs me that, when collecting salmon and trout eggs in the winter, he finds that common raw onions enable him and his men to bear the ice and cold of the semi-frozen water much better than spirits, beer, &c. The Arctic expedition, just now about to start, should therefore take a good stock of onions. Finally, if a person cannot sleep, it is because the blood is in the brain, not in his stomach; the remedy, therefore, is obvious; call the blood down from the brain to the stomach. This is to be done by eating a biscuit, a hard-boiled egg, a bit of bread and cheese, or something. Follow this up with a glass of wine or milk, or even water, and you will fall asleep, and will, I trust, bless the name of the writer.

SCIENTIFIC.

A GENTLEMAN who died recently in England bequeathed five hundred dollars to Dr. John Stenhouse, F.R.S., in recognition of the service he has rendered to mankind in discovering the utility of charcoal as a filter for air.

In a lecture on tides delivered before the Royal Institution a short time ago, Professor P. Martin Duncan referred to the existing traces of ancient tidal action on the earth's surface as evidence of the great antiquity of our moon.

A BOILING lake, two miles in circumference, and situated on a mountain at a height of twenty-five hundred feet above the level of the sea, is said to have been recently discovered in the West Indian island of Dominica, the loftiest of the Lesser Antilles.

THE introduction of American shad into British waters is strongly advocated by many fish culturists, although an attempt to introduce them in Germany failed, on account of the time necessarily occupied in transporting the young fish to that country. The English scientific journal, Nature, thinks that no greater boon could be conferred upon Great Britain than the transfer of the shad, together with the allied American fish known as the alewife, into its waters.

THE practice of cleansing bottles with leaden shot is objectionable on account of the danger that the lead may poison the liquid they receive. No such objection applies to iron wire clippings, which are recommended by M. Fardes, the French author, for the same purpose. In regard to the subject of lead-poisoning, we also notice that Professor Henry E. Roscoe, the well-known and able English chemist, has lately said that there can be little doubt that water drawn from leaden hot-water cisterns would be contaminated with lead.

TO OBTAIN soap bubbles that will show the changing colors of the rainbow the directions are as follows: Take half a pint of water that has been boiled and become cold, and put into it a quarter of an ounce of Castile soap, cut up fine. Put this in a pint bottle, and set it in hot water in a saucepan on the fire; there let it remain an hour or so, now and then giving it a good shaking till the soap is dissolved. Let the fluid stand quiet for the impurities and coloring matter of the soap to settle; then pour off the fluid and add to it three or four ounces of glycerine, and your soap bubble solution is ready. In an ordinary way you may blow the bubbles easy with a tobacco pipe, but if you wish to attain scientific perfection, you had better employ a glass pipe. By adding a large quantity of glycerine you may make these bubbles so strong that you can play battledore with them.

BALLOONING, for scientific purposes, has recently been prosecuted with extraordinary vigor in France. The long voyage of the balloon Zenith, from Paris, three hundred miles to the vicinity of Bordeaux, has been mentioned. Subsequently the Saturne, under the charge of M. Godard, made a trip from Bayonne, in France, to a town near Pampluna, in Spain, being thus the first balloon that ever crossed the Pyrenees; and still later the Zenith was the vehicle of the extraordinary ascent—without a parallel in the history of ballooning—which resulted in the death of two of three aeronauts, MM. Sivel and Croce-Spinelli, in consequence of the extreme rarefaction of the air at the immense height to which they ascended. The barometer, held in their hands even in death, indicated that they must have risen eight miles above the surface of the earth. A height of about seven miles is believed to have been reached by the English aeronauts Glaisher and Coxwell, in their famous ascent from Wolverhampton in 1862. Coxwell became senseless, but Glaisher, although he lost the use of his arms for the time being, preserved sufficient presence of mind to pull the valve-rope with his teeth. This act saved his life and that of his companion, for the balloon at once began to descend.

OUR CHESS COLUMN.

Solutions to Problems sent in by Correspondents will be duly acknowledged.

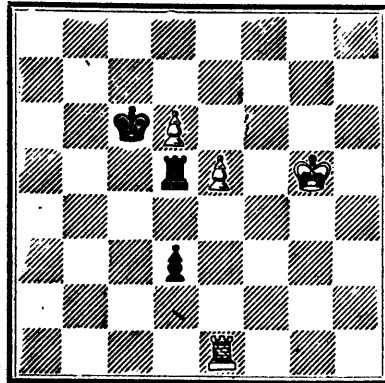
TO CORRESPONDENTS.

Rosenkrantz.—Solution of Problem No. 19. Correct. Solution to No. 18, not the shortest road to victory. See Solution in Chess Column.

During the last month, Mr. Blackburne, the noted English Chess player, undertook to play at the City of London Chess Club, ten games simultaneously without seeing board or men, against as many strong players of the Club. In about five or six moves several of the opponents of Mr. Blackburne were beginning to acknowledge defeat, and in two hours more only three remained. Two of those soon afterwards relinquished the board, and the remaining one won his game. It will thus be seen that in this encounter Mr. Blackburne had not overrated his strength, although it must be acknowledged that he had an extraordinary feat to perform.

PROBLEM No. 21.

By Sarratt.  
BLACK.



WHITE.

Black having the move, takes King's Pawn with Rook in the expectation of pushing his Pawn to Queen. What ought White to play?

SOLUTIONS.

Solution of Problem No. 19.

WHITE.

1. R to K B 5th
2. P to Q 4th (dis ch)

BLACK.

1. K takes Kt (dis ch) or (A)
1. K takes Q B P (dis ch) or (B)

Mate.

2. B to Q 4th
2. Kt to Q B 2nd

Checkmate.

Solution of Problem for Young Players, No. 18.

WHITE.

1. Q to K Kt 8 (ch)
2. Kt to K R 6th

BLACK.

1. K takes Q.

Checkmate.

PROBLEMS FOR YOUNG PLAYERS.—No. 19.

WHITE.

- K at K R sq
- Q at K Kt 5th
- R at K B 4th
- Pawn at K R 4th.

BLACK.

- K at K R 3rd
- Q at K Kt 6th
- R at K Kt 3rd
- B at K 3rd
- Kt at K B 3rd
- Kt at K Kt 5th
- Pawn at K R 4th

White having the move, draws the game. A position occurring in actual play.

GAME 26th.

Played in London, Eng., between the Rev. Mr. Mac Donald and Mr. Maude.

(Allgater Gambit.)

Rev. Mr. MacDonald.

Mr. Maude.

WHITE.

1. P to K 4th
2. P to K B 4th
3. Kt to K B 3rd
4. P to K R 4th
5. Kt to Kt 5th
6. Kt takes K B P
7. B to Q 4th (ch)
8. B takes P (ch)
9. P to Q 4th
10. Kt to Q B 3rd
11. Q to Q 3rd (ch)
12. Q to Kt 5th (ch)
13. Q takes B
14. Kt takes P
15. Q to Q Kt 5th
16. Kt to Q B 7th (ch)
17. Q takes K Kt (ch)
18. Q takes Q (ch)
19. P to Q B 3rd (ch)
20. Castles
21. B to K Kt 5th
22. P takes P
23. Q R to K sq
24. P to K 5th
25. P to Q B 4th
26. P to Q Kt 3rd
27. P to Q 5th
28. P to Q 6th
29. P to K 6th [f]
30. R takes B
31. B takes Kt
32. R to K 3rd
33. R to Q Kt 3rd
34. R to Kt 7th (ch)
35. P to Q 7th
36. B to Kt 5th (ch)
37. B to Q Kt 3rd
38. R to Q Kt sq
39. K to B sq
40. Q R takes Kt P
41. R to K 2nd (ch)

BLACK.

- P to K 4th
- P takes P
- P to Kt 4th
- P to Kt 5th
- P to K R 3rd
- K takes Kt
- P to Q 4th
- K to K sq [a]
- Kt to K B 3rd
- Kt to K R 4th
- B to Q Kt 5th [c]
- P to Q B 3rd
- P takes B
- Kt to Q B 3rd
- R to K B sq
- Q takes Kt
- Q to K B 2nd
- R takes Q
- P to K R 4th
- P to B 6th
- B to Q 2nd
- P takes P
- B to K Kt 5th
- Kt to K 2nd
- P to K B sq
- P to Q Kt 4th
- P takes Q B P
- P takes Q Kt P [e]
- B takes K P
- P to Kt 7th
- K to Q 2nd
- R to Q B 8th
- R to Q B 7th
- K to K 3rd
- R to K Kt 2nd [ch]
- R takes P
- R to K B 2nd
- R to K Kt 7th [ch]
- P to K R 7th
- P to B 7th
- K to Q 4th.

And White, after a series of checks, forced checkmate.

NOTES.

[a] This is better than K to Kt 2nd, in answer to which White could take Q Kt P with B.

[b] Threatening both to advance the K P and to take Kt P with B. If in the latter case B takes B. White checks with Q or Q Kt 5th, winning K Kt.

[c] An inconceivable move, P to Q B 3rd was the correct play. Suppose:

WHITE

BLACK.

10. P to K 5th (best)
11. P to K 5th (best)
12. Q to Kt 6th (ch)
13. Q takes Kt (best)
14. B takes P
15. B to Kt 5th (ch)
- P to Q B 3rd
- P takes B
- K to K 2nd
- B to K 3rd
- Q to K sq
- K to Q 2nd

And Black's game is preferable.

[d] White has now an excellent game. The Pawns in the centre are very powerful.

[e] Desperate, indeed, was there anything better? White threatened to advance the K P, and the onward march of those Pawns would have become irresistible had Black moved the Kt away. We think, therefore, that Black acted wisely in abandoning the Knight at this juncture, trying to make the most of his Pawns on the other side of the board.

[f] Undoubtedly the best move.

[g] Again the best move under the circumstances.