

READINGS FROM CURRENT LITERATURE.

LOVE'S RUBICON.

I KNEW a stream for flashing trout,
For lights and shades and lyric tones,
And lovers loitering about
Its stepping stones.

The tuneful waters were not wide,
The stepping stones were only three—
A meeting place from either side
For her and me.

But one she would not ever cross
Until that weird November day
I asked once more; 'twas gain or loss
In yea or nay.

A graveness took her laughing lip
And tender made her doubtful tones;
She was afraid lest she should slip
Upon the stones.

Almost I thought my cause was lost,
When, lo, her caprice all foregone,
She laid her hand in mine and crossed
Love's Rubicon!

—Kate Carter, in *The Magazine of Art* for November.

JAPANESE ART.

THE original artistic capacity of the Japanese being conceded, it must be remembered that it is not uncommon to meet with families which have practised the same art for fifteen or twenty generations; and therefore heredity and habit must have added greatly to this capacity. The Japanese islands stretching themselves, as they do, throughout the north temperate zone, while surrounded by a sea penetrated by a tropical current, have a climate which invites out-of-door life, and offers varied natural phenomena, even including typhoons, snowstorms, eruptions, and earthquakes. Owing to the latter, the buildings are kept low, and are unobtrusive, not affording temptation for meretricious ornament; nor are there to be found any of the vulgar piles which blot a whole landscape. Thus the wealth of the old nobility was not wasted for lavish architecture, and could be spared for other forms of art, in which a large and widely distributed population was and is practically interested, each art-worker's family being a little centre of art education. The elaborate etiquette of the old imperial court and the rites of the temple gave employment to artisans, whose time was of so little money value, owing to the simple standards of living, that it could be freely used in perfecting their work. Theirs was the life which the genuine artist desires above all things; constant imaginative work, and direct contact with unspoiled nature, assurance of simple food and of shelter, and absence of anxiety; add to these intelligent appreciation of his work, and he may well be envied by kings and plutocrats. It may here be remarked that one important use of the wealthy would seem to be to foster the seedling art, usually for merely personal ends, though the day must come when it shall spread its roots far beyond such influence.—*W. Henry Winslow, in New England Magazine.*

SPECTRAL OBSERVATIONS.

It is unnecessary to remind our readers that the spectroscopic many years ago enabled astronomers to demonstrate that certain of the fixed stars are in a state of motion, either towards or away from the earth. The evidence supporting this conclusion was furnished by the displacement of the principal lines in the spectra of the different stars. A large number of spectral observations of all the leading fixed stars have been carried out in the Potsdam Observatory by Professor Vogel, in conjunction with Dr. Scheiner, for a considerable time past. The result of these observations went to show that the displacement of the spectral lines was subject to periodic variation. Professor Vogel and Dr. Scheiner came to the conclusion that this variation was due to the motion of the earth in her orbit, as she is at one time of the year approaching certain of the fixed stars, and six months later receding from them. This annual variation in the displacement of the lines was accurately measured, and from the data thus obtained the velocity of the earth in her orbit was calculated. The result arrived at agreed, within a few fractions of a kilometre, with the velocity as calculated from other sources. It would not, we think, be too much to say that no greater triumph of the scientific application of photography has been achieved within the year.—*British Journal of Photography.*

ENCOUNTERING A WATERSPOUT.

In his "Explorations in New Guinea," Captain Strachan gives an account of his meeting a waterspout near the coast of that island. The captain's opportunity for observing the phenomenon was remarkably good, and his description of it presents some new features. "The wind was light and baffling, and heavy, dark clouds were rising to the westward and working down upon us. Between three and four o'clock in the afternoon the clouds gathered near the ship and sucked up from the bosom of the Gulf no less than six tremendous waterspouts, which travelled rapidly towards us. One huge simoom of the deep came whirling along directly towards the vessel. The men were called to their arms, the big guns were

loaded and covered ready to fire when the huge column of water was within 200 yards. The rifles were kept continuously firing, but from excitement or some other cause I could not get the men to fire well together, and one of the most tremendous waterspouts that ever I had seen was within 500 yards of the vessel ere the rifles succeeded in breaking it. I have frequently described waterspouts in other parts of the ocean as having nothing grand or imposing about them. This I can say no longer, for as the monster rushed down towards the ship like an avalanche, it seemed to be dashing spray for at least thirty or forty feet from its base, and could be compared only to some huge steam engine, rushing along without control, with the valves open, and shooting a tremendous volume of steam round a great spiral column of smoke. While standing, port fire in hand, at the swivel gun, I was enabled to determine that the great spiral column of water was revolving from left to right. No sooner had we succeeded in breaking it than a sharp breeze sprang up and dispersed the five remaining waterspouts, and carried us rapidly along the coast, which I had hugged pretty close with the intention of hailing a canoe from the village.

THE CAVALRY OF THE FUTURE.

OWING to the destructive fire of the latest description of rifle, infantry are compelled at an early period of the attack to assume a very open formation and to break up a portion of their force into small fractions. This arm is consequently more open to effective attack and loss of morale than formerly. Imagine the case of a brigade advancing across a plain in formation of attack. In the face of the destructive fire to which it would be subjected, the brigade would be broken up into a series of small echelons with, extended or loosened files covering a considerable depth. All eyes would be fixed intently on their front, and it would be strange indeed if there were not on a flank some cover, such as a hill, a dip in the ground, a high hedge, a plantation, or a cluster of houses. The infantry, startled by the sudden appearance of the rushing horsemen, whom they would not discover until at least half the distance had been covered, would be in a sorry plight. A cry of "Look out for cavalry!" might be raised, but all would be more or less flurried. Only those bodies on the flank would be able to fire, and these would have to change front to do so. They would either cluster together, in which case time would be lost and a good mark be afforded; or they would remain with loosened files and be thus deprived of the moral support afforded by the touch of comrades' elbows. In any case, their fire would probably be hasty, ill-aimed, and of short continuance. Once among the scattered and loosened echelons, the cavalry would have little to fear. The dragoons would probably sabre but few, but they would indirectly cause greater loss than that suffered by them, while at all events they would certainly bring about a delay which might be cheaply purchased by the death or capture of a hundred men.—*Army and Navy Gazette.*

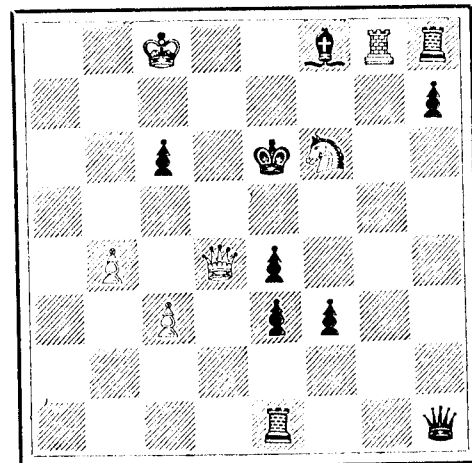
A NOVEL ENGINEERING WORK.

ON the northern shore of the Duddon estuary, in the county of Cumberland, there has been steadily worked during the last 20 years or more an important mine, producing a large quantity of rich red hematite iron, which has been found to be of great value for mixing with other ores employed in the production of manufactured iron and steel. This mine is owned by the Hodbarrow Mining Company, who are proprietors of the land, the mineral rights being leased to them by the Earl of Lonsdale. The ore having been excavated or "won" as close to the sea margin as it has been possible to work without letting down the surface of the land and admitting the influx of the sea, thereby drowning the mine, the Company have recently obtained a fresh lease from Lord Lonsdale, undertaking to construct a barrier to keep back the sea along that portion of the estuary in front of the mine, in order that they might "win" the ore from underneath some twenty-six acres of the sea-bed. To effect this object a massive and substantial sea barrier has now been constructed. This may justly be regarded as unique in character, inasmuch as it is at one and the same time a breakwater and a watertight dam. By means of this work the sea was about three months since finally and successfully excluded from the area above mentioned. The masonry and sluices for the discharge of rainfall and land soakage having now been completed, the final and memorial block was laid recently, in the presence of many directors and shareholders of the Company. This great sea barrier presents an imposing appearance. It is just two-thirds of a mile in length, and for about one-half this length is fully fifty-feet in height from the bottom of the foundations to the top of the parapet. At high water of high spring tides there is a depth of rather more than twenty-feet against the seaward face of the work, but, being exposed during south-westerly gales to the full force of the waves sweeping up the Irish Channel, backed by the Atlantic rollers, the sea at such times breaks with great violence against the new barrier, as was, of course, expected, and has been provided for in the structure just completed. The engineer of the work is Sir John Coode, and the contractors are the well-known firm of Messrs. Lucas and Aird. There is every reason to believe that the anticipation of the directors and shareholders of being able to continue the working of the iron ore over a further period of twenty-five years may be realized, thus giving employment during that time to about 1,500 men.

CHESS.

PROBLEM No. 517.

By M. N., from *Le Monde Illustré*.
BLACK.

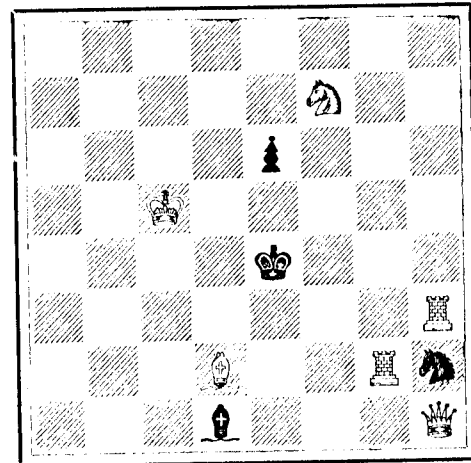


WHITE.

White to play and mate in three moves.

PROBLEM No. 518.

By S. LOYD, New York.
BLACK.



WHITE.

White to play and mate in two moves.

SOLUTIONS TO PROBLEMS.

- No. 511.
White. 1. Kt-Q 6
2. Kt-K 4 +
3. Q mates
Black. 1. K x Kt
2. K moves
if 1. Kt x Kt
2. Kt x P
3. Q-B 4 mate
With other variations.

- No. 512.
B-R 8
In this problem there should be a Black Queen on Black's K R 6 instead of a White Queen.

GAME PLAYED IN THE RECENT MANCHESTER TOURNAMENT.

VIENNA OPENING.

SCHALLOPP.	Gossip.	SCHALLOPP.	Gossip.
White.	Black.	White.	Black.
1. P-K 4	P-K 4	9. R-Q Kt 1	P-Q Kt 3
2. Kt-Q B 3	Kt-K B 3	10. Castles	P-Q B 4
3. P-B 4	P-Q 4	11. P-K R 3	B-R 4
4. P x K P	Kt x P	12. B x P + (b)	K x B
5. Kt-B 3	Kt x Kt (a)	13. Kt-Kt 5 +	B x Kt
6. Kt P x Kt	B-K 2	14. Q x B +	B-R 3
7. P-Q 4	Castles	15. B x B	P x B
8. B-Q 3	B-K Kt 5	16. R-B 6	K-Kt 2

White announces mate in three moves.

NOTES.

- (a) Unnecessary, as the White Kt is well posted.
(b) A pretty sacrifice, which would not "keep," for if P Q B 5 were allowed, Black K could go to Kt 3 presently, the Q having no check from Q 2.—*Baltimore Sunday News.*

It is said that felt made from hair, placed in the foundations of engines, effectively remedies the noise and vibration so often a cause of complaint. An electric company recently removed one of its 90 horse-power engines from its foundations, which were taken up to the depth of 4 feet. A layer of hair-felt, to the thickness of 5 inches, was then laid down, and run up round the sides to the height of 2 feet. The brickwork was then built up on the top of this.—*Electrical Review.*

Catarrh

In the head
Is a constitutional
Disease, and requires
A constitutional remedy
Like Hood's Sarsaparilla,
Which purifies the blood,
Makes the weak strong,
Restores health.
Try it now.

It is dangerous to neglect catarrh for it leads to bronchitis and consumption. Hood's Sarsaparilla cures catarrh in all forms.