

TO CORRESPONDENTS.

A. T.—Yes. Ensigns of the Guards rank with lieutenants of other regiments, lieutenants with captains, captains with lieutenant-colonels, and on exchanging into the line they exchange into the higher positions.

GROG.—The quaint name of *grog* is said to be derived from a nickname of Admiral Vernon who introduced into the royal navy the mixture of rum and water, served out as a beverage to the men. In bad weather he was in the habit of walking the deck in a rough *grog*gram cloak, the sailors thence called him *Old Grog*, and then transferred the name to the drink.

G. F.—The article is declined with many thanks.

ISAAC.—The meaning of Isaac is, "he will laugh," and of Isaiah "Salvation of God."

TYRO.—We do not understand you—write again and try to be plain and concise.

A SUBSCRIBER.—Edward Jenner the discoverer of vaccination was born at Berkely in Gloucestershire in 1740. The imperial parliament voted him in 1802 a grant of £10,000 and in 1707 a second grant of £20,000. Honours were also conferred upon him by foreign courts and he was elected an honorary member of nearly all the learned societies of Europe. Since he died a public statue has been erected in his honour in London.

H. H. V.—With pleasure.

J. J. W.—George Sand is a *nom de plume*, the real name of the writer is the Baroness Dudevant.

LIZZIE A.—We regret that we cannot oblige our correspondent.

J. SEWELL.—The dowry of the Princess Royal was £40,000 with £8,000 per annum.

J. SCOTT.—The meaning of the term *Missa di voce* used in singing, is the gradual swelling and again diminishing of the sound of the voice on a note of long duration.

S. C. T.—Declined with thanks.

DAVID.—On the 29th. March 1652.

CHROMIUM.—This remarkable metal, which derives its name from *chrome*, a colour, may be obtained by exposing to a very high temperature a mixture of peroxide of chromium and charcoal, then reheating the powder thus obtained with a small quantity more of the peroxide of chromium in a porcelain crucible. In this state it is a slightly coherent mass. It is extremely hard, scratching glass with the greatest facility, an angular piece, set in an appropriate handle, would therefore be a good substitute for the glazier's diamond. It is also magnetic, in this respect resembling iron, but its fusibility being difficult, it has not yet received any practical application. Its salts, however, are largely used in dyeing. The chromate of lead is used as a pigment in painting, and the oxide forms a beautiful green colouring matter, which is replacing the poisonous arsenical green lately employed in colouring paper for papering rooms. Another salt, the bi-chromate of potash, in conjunction with oil of vitriol, is also largely employed in the purification and bleaching of wax and fatty matters. A singular peculiarity of the bi-chromate of potash is, that although it is readily soluble in water, forming a bright yellow solution, yet after exposure to the light of the sun for even a few minutes, some chemical change takes place, and it is no longer soluble. If therefore a piece of clean white blotting-paper be dipped into a solution of bi-chromate of potash, and then exposed for a few minutes under a negative photograph to sunlight, on removal, after being thoroughly well washed and dried, a copy, though somewhat indistinct, of the photograph is readily obtained. This is a very pleasing experiment for a sunny day.

Improvements in apparatus for obtaining latitude and longitude have recently been patented by Mr. C. F. Varley, whose name is connected with the laying of the Atlantic telegraph cable.

This apparatus can be used for ascertaining the elevation above the horizon of lights and other objects, and thus furnishing the data for computing their distance from the observer.

CHESS.

A match between Messrs. Zerega and Worrall, at the New York Chess Club, has terminated in favor of the former by a score of 7 to 3.

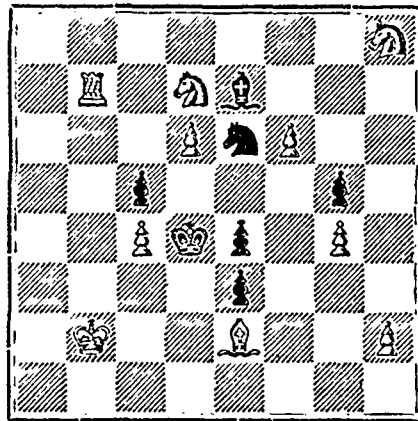
A Chess match by telegraph has been commenced between the New York and Detroit Chess Clubs. Two games will be played, and if these terminate in a manner to render the conflict indecisive, a third will be contested. The players on the part of New York are Capt G. H. Mackenzie, Dr. Barnett, and C. H. Stanley, and on the part of Detroit, Messrs. H. A. Bury, C. C. Elder, and others.

According to our latest intelligence, the grand international Chess Tournament was expected to commence on the 3rd inst. The London Chess Clubs were to be represented by Mr. De Vere, Herr Steinitz, likewise, would leave England and break a lance in the tourney. The American amateurs are so far represented by Mr. Samuel Lloyd and Mr. James Thomson. The appearance, however, at an early period, of Mr. Paul Morphy, is likewise confidently anticipated.

PROBLEM, No. 76.

BY F. B.

BLACK.



WHITE.

White to play and Mate in three moves.

SOLUTION OF PROBLEM, No 74.

WHITE	BLACK.
1 K to K sq.	P to Q Kt 7.
2 Kt to h 5.	P Queen's
3 Kt to Q 3 Mate	

THE MACKENZIE AND REICHELHM MATCH.

SECOND GAME.

RUY LOPEZ OPENING.

WHITE. (Mr. Reichelm.)	BLACK (Mr. Mackenzie)
1 P to K 4.	1 P to K 4.
2 Kt to K B 3.	2 Kt to Q B 3.
3 B to Q Kt 5.	3 P to Q R 3.
4 B takes Kt.	4 Q P takes B.
5 Castles.	5 B to Q 3.
6 P to Q 4.	6 Q B to Kt 5.
7 P takes P.	7 B takes Kt
8 Q takes B.	8 B takes P.
9 K to Q sq.	9 Q to K 2.
10 Kt to B 3.	10 Kt to B 3.
11 B to Kt 5.	11 Castles.
12 B takes Kt.	12 B takes B.
13 R to Q 3.	13 Q R to Q sq.
14 Q R to Q sq.	14 K takes K.
15 K takes K.	15 B takes Kt
16 K takes B.	16 Q to Kt 5.
17 P to Q Kt 3.	17 K to K sq.
18 P to K Kt 3.	18 R takes P.
19 K to Q 3.	19 K to K 3 (ch)
20 K to Kt 2.	20 Q to K 2.
21 Q to Kt 4.	21 K to K 3.
22 Q to Q 4.	22 P to K Kt 3.
23 K to K 3.	23 R takes K.
24 P takes Kt	24 P to Q B 4.
25 Q to Q 3.	25 Q to Q 3.
26 Q to K 4.	26 P to Q B 3.
27 Q to K B 4.	27 Q takes Q.
28 K P takes Q.	28 K to Kt 2.
29 K to B 3.	29 K to B 3.
30 P to K R 4.	30 P to B 4.
31 P to Q B 4.	31 K to B 4.
32 K to K 3.	32 K to Kt 5.
33 K to B 2.	33 P to Q Kt 4.
34 K to Kt 2.	34 P to Q Kt 5.
35 K to B 2.	35 K to R 6.
36 K to B 3.	36 P to K B 4.
37 K to B 2.	37 K to R 7 and wins.

WITTY AND WHIMSICAL.

DESIGNING MEN.—Architects.

CHARMING CLOTHES FOR HOT WEATHER.—The "Melton Suits."

Why does a policeman on duty resemble a tipsy Irishman?—Because he's pat-roling.

If all the letters in the alphabet were to run a race, which letter would be sure to be first in starting?—The letter s.

A musical author, being asked if he had composed anything lately, replied, "My last work was a composition with my creditors."

A lively Hibernian exclaimed at a party where Theodore Hook shone the star of the evening: "Oh, Master Theodore, but you're the *hook* that nobody can *bate*!"

"If there is anybody under the canister of Heaven that I have in utter excrescence," says Mrs. Partington, "it is the slander, going about like a boy constructor, circulating his calomel upon honest folks."

An *ignoramus* had been sick, and on recovering was told by the doctor that he might take a little animal food. "No, sir," said he; "I took your gruel easy enough, but hang me if I can your hay and oats."

Felix McCarthy, of the Kerry Militia, was generally late on parade. "Ah, Felix, said the sergeant, "you are always last."—"Bo aisy, Sergeant Sullivan," was his reply; "sure some one must be last."

A Boston paper says that a hasty pudding which had been set out to cool one morning in that city, was taken to the station-house, by a policeman, on a charge of *smoking in the street*—a practice which is not permitted in that tidy little city.

"Illustrated with cuts!" said a mischievous young urchin, as he drew his knife across the leaves of his grammar. "Illustrated with cuts!" repeated the schoolmaster, as he drew his cane across the back of the mischievous urchin.

An elderly lady, telling her age, remarked she was born on the 23rd of April. Her husband, who was present, observed, "I always thought you were born on the 1st of April?"—"People might well judge so," responded the lady, "in the choice I made of a husband."

A nice old lady of our acquaintance declares that she thinks it very strange that a little quick-silver in a glass tube can make such awful hot weather by just rising it an inch or so.

We have heard of an economical man who always takes his meals in front of a mirror—he does this to double the dishes. If that isn't philosophy, we should like to know what is.

A SAVAGE RESTOR.—A John Bull, conversing with a Canadian Indian, asked him if he knew that the sun never sets on the Queen's dominions. "No," said the Indian.—"Do you know the reason why?" asked John.—"Because heaven is afraid to trust an Englishman in the dark," was the savage's reply.

A young farmer of Cumnock, Ayrshire, considered that the daughter of a neighbour would suit him as a wife, and having made up his mind, he proposed to the fair one without the usual preliminaries. The young lady's reply was, "Deed, Jamie, I'll tak ye; but ye maun gie me my dues o' courtin' for a' that."

"Jack the Barber"—who did hair-cutting and so forth all the week and preached on Sundays—was a strange fellow, sure enow. While he was hair-cutting or shaving he had all his thoughts on his sermons an' such like, an' he always spoke a "word in season" to his customers. One day a stranger called to be shaved, so Jack lathered his face, held back his head, an' just as he was beginning to scrape him w' the razor he said to the man, in a very solemn tone, "My good brother, are you prepared to die?" The man looked hard at Jack, still harder at the razor, and then rushed half terrified out of the shop, all lathered as he was, shouting out at the top of his voice, "Murder! murder!", Jack followed at his heels, but could not catch him, an' never saw his new customer again.—*Methodist Recorder.*