

and fall gave motion to the watch, or rather kept it in perpetual motion; for of itself alone the watch could go a year. Even here, nevertheless, the inventor was not necessarily nearer than before to the point he ultimately had in view, of constructing a perfect chronometer, or of thereby discovering the longitude; because, in fact, it was not perpetual motion at all which was really required to do this; a common watch wound up regularly, and never allowed to stop, is in perpetual motion. It was perfect regulation which was requisite; and although Coxe's watch is said to have had a self-regulator to let off or adjust all excess of power caused by the irregularities of the rise and fall in the barometer, there is no reason to believe that he had thus attained a perfect regulator; and even if he had, that at least was not "perpetual motion."

Again, another projector proposed to make a common clock to be a perpetual mover by means of the tides, so that in the rise a pipe communicated the water to a bucket, which thus descended by the increased weight; and in so doing, wound up the clock; when it was to be tipped over, by a projecting knob, or some other means and so allowed to re-ascend as the weights descended. Here, too, was a very feasible and practicable idea of perpetual motion; and a correspondent, some time ago, proposed some such means of keeping the Westminster Palace clock going.

Should any of our readers imagine that the search for perpetual motion must now be given up in this enlightened nineteenth century, they will find out their mistake when we tell them that, down to the year 1860 inclusive, there has been a perpetual dribble of patents taken out in various countries, each and every one of them professing to have discovered it. In the English records of patents alone, and most of them since the beginning of the present century, seventy-four patentees have obtained patents for perpetual motion,—not by that now hackneyed name, certainly, but in the less questionable and more scientific form of "improvements in obtaining motive power," and such like. Among the patentees were a prince, a baronet, two counts, a knight of the Tower and Sword, a general, a groom of the privy chamber, and the governor of Trinity Ground. Their patents cannot have cost much, if any, less than £4,000—a large amount to pay for the empty privilege of possessing letters-patent to so much moonshine.

PASTIMES.

DECAPITATIONS.

1. Behead an exploit, and leave what all must do; transpose, and find a beverage.
2. Twice behead contention, and leave what is prevalent; transpose, and find what is welcome in winter.
3. Behead to wander, and leave an article which generally appears on the tea-table; behead again, and leave something lustrous.
4. Behead to raise up, and leave part of the head.
5. Behead a celebrated Scotch reformer, and leave a Latin noun; behead again, and leave an animal.

CHARADES.

1. While you're my first, improve my last, My meeting whole will soon be past.

GIRLS' NAMES.

2. A county in Europe and a consonant
3. A nickname for a boy and a girl's name.
4. A vehicle, a vowel, and a mark.
5. A girl's name and an article.

ENIGMA.

BY AN IRISHMAN.

I am found in the hand of the Queen,
In the hand of her maid I am seen;
I am found in the hand of the knave,
I am used by all sharers in trade;
I am seen in the garden and grove,
Where lovers in happiness rove;
For me will an Irishman fight,
To gain me his chiefest delight.

ARITHMOREMS.

TOWNS AND VILLAGES.

1. 100 lo gin 500 wool
2. 6 OK 50 ale.
3. 1001 bond.
4. Is 500 worn?
5. 1000 hot 500 safe R.
6. Lo 1000 O fie 550 B.

ARITHMETICAL PROBLEMS

1. A person left a legacy of £700 among four persons, A, B, C, and D. One-fifth of A's share, one-fourth of B's, and one-third of C's, were each equal to one-half of D's share. What was the value of each person's share?

2. A certain number of men each contribute an equal sum to a fund, the total amount of which is £3 0s. 9d.; this sum is then divided in the following manner: for one purpose, as many pence are set aside as are equal to the square of the number of subscribers, and the remainder is retained for another purpose. Now, if the first sum be multiplied by the number of subscribers it will be equal to the total amount, £3 0s. 9d.; or if the first sum be multiplied by the number of subscribers, minus one, it would be equal to the second sum. Required, the number of subscribers, the amount of each subscription, and the amount devoted to each purpose.

SOLDIER.

ANSWERS TO ANAGRAMS, &c., No. 28.

ANAGRAMS.—1. F. W. Haultain. 2. James Cowan. 3. Amos Wright. 4. Walter Ross. ACROSTIC.—Ophelia, Oxford, Pichegru, Helvetia, Elizabeth, Leghorn, Iroquois, Adrian.

CHARADES.—1. Wyvant has furnished us with the following answer to this charade:

MORTUUS EST.

Midnight mass in the Abbey Chapel
The monks are hoarsely singing;
And slowly tolls the abbey bell
In the centre turret swinging.

A corpse lies pale in the middle aisle,
Where the moonbeams chilly fall;
And chanting slow for the dead, the while,
Are the choristers one and all.

The prayers are said for the mighty dead,
And they raise the chancel stone;
While the monks, seen dim, low chant the hymn
Of Χριστὴ ἐλεησον.

For the pilgrim so hoar, that lieth there,
Was known both far and wide;
In youth he had fought in the land of prayer,
By English Richard's side.

And in age he had watched by the holy tomb,
Each palmer's guide and page;
But now are his works and his labours done,
And closed his pilgrimage.

WYVANT.

2. Labrador.

RIDDLE.—Jonah.

DECAPITATIONS.—1. Babe abe be. 2. Grave rave Eva.

TRANSPOSITIONS.—1. Handkerchief. 2. Paraphrase.

The following answers have been received.

Anagrams—Cloud, Levi, W. L., E. H., Nemo, H. H. V., Martin, Leslie.

Acrostic.—Dot, Festus, E. H., Nemo, Nymph, H. H. V., Leslie.

Charades.—E. H., Wyvant, Dot, Nymph, W. L., Argus, H. H. V., Festus, Leslie, Arctic, L. L. Riddle.—Dot, Argus, L. L., Festus, H. H. V., Arctic, W. L.

Decapitations.—H. H. V., Arctic, E. H., Dot, Levi, A. H., Festus, J. F., Nymph.

Transpositions.—Dot, H. H. V., Levi, Festus, A. H., Nymph, L. L., Argus, J. F.

At the sale of the library of Mr. Joseph Parkes, lot 1,697, containing a series of secret service letters and papers, between 1790 and 1827, throwing much light on the secret expenditure of English Ambassadors abroad, was, at the instigation of Earl Russell, withdrawn by command of the Earl of Clarendon. These papers may probably have been sold at some time by the Foreign Office as waste.

CHESS

TO CORRESPONDENTS.

T. P. B., SEAFORTH.—You may rely upon our hearty co-operation if that contemplated arrangement is carried into effect.

E. H. C., WASHINGTON, D. C.—Mr. Groves has forwarded us the Problems you sent him. We shall make early use of them, and hope they will not be the last you will contribute to our column.

G. G., ST. CATHARINES.—Again accept our thanks for your kindness. Wrote you last week; have you received the letter?

VICTOR.—Your "notes" have been duly noted. Shall be glad to hear from you again.

We clip the following from the Chess Column of the St. Catharines *Constitutional*:

"With this issue we close our chess column; the object we had in view when commencing it being realized—which was, that Canada might have a paper that devoted a small space to the interests of the numerous admirers of the noble game residing in the Province. The Montreal *Saturday Reader* now publishes a column weekly, which we sincerely trust may be a permanent one. We sincerely thank those friends and contributors who assisted us so freely during our short existence."

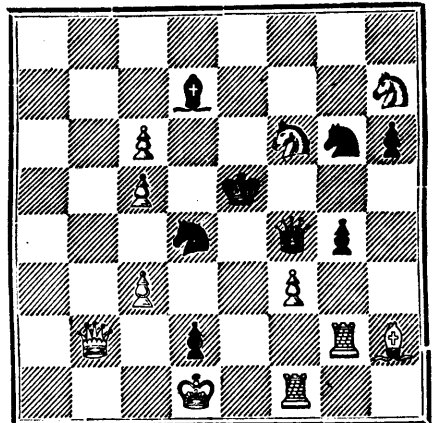
Many, with ourselves, will regret that Mr. Groves, its able and talented chess editor, should have come to this determination; for by his zeal and untiring efforts, he has done much to foster a love of the noble game in Canada; his services in its behalf can, therefore, ill be spared.

SOLUTION OF PROBLEM No. 16.

- | | |
|-------------------------------|---------------|
| WHITE. | BLACK. |
| 1 B. to Q. Kt. 8th. | P. to K. 3rd. |
| 2 K. to Q. B. 2nd. | K. takes Kt. |
| 3 K. moves, discovering Mate. | |

PROBLEM No. 18.

BY S. L. MITCHELL, JR., NEW YORK.
BLACK.



White to play and Mate in three moves.

Game played at the odds of Pawn and two moves, in a recent match between two members of the Montreal Chess Club.

Remove White's King's Bishop's Pawn.

BLACK. (J. W. Shaw.) WHITE. (Prof. Hicks.)

- | | |
|-----------------------|----------------------|
| 1 P. to K. 4th. | P. to Q. 4th. (a) |
| 2 P. to Q. 4th. | B. to K. B. 4th. |
| 3 P. to K. 5th. | B. to Q. 2nd. |
| 4 P. to K. Kt. 4th. | P. to K. 3rd. |
| 5 B. to Q. 3rd. | P. to K. Kt. 3rd. |
| 6 P. to Kt. 5th. (b) | Kt. to Q. B. 3rd. |
| 7 P. to K. R. 4th. | Kt. to Kt. 5th. (c) |
| 8 P. to K. B. 4th. | Kt. takes B. (ch.) |
| 9 P. to E. 5th. | Q. to K. 2nd. |
| 10 Q. takes Kt. | P. to K. R. 3rd. |
| 11 P. takes P. | P. to Q. K. 3rd. (d) |
| 12 B. to K. 3rd. | Q. to Kt. 2nd |
| 13 Kt. to Q. B. 3rd. | P. takes P. |
| 14 Castles. | R. takes R.* |
| 15 R. to E. 7th. (e) | Kt. to K. 2nd. |
| 16 P. takes R. | Kt. to B. 4th. |
| 17 Kt. to K. B. 3rd. | B. to K. 2nd. (f) |
| 18 Kt. takes Kt. P. | Q. to E. sq. |
| 19 E. to R. sq. | B. takes Kt. |
| 20 P. to Q. R. 3rd. | Castles. |
| 21 P. takes B. | R. to B. sq. (h) |
| 22 P. to Kt. 6th. (g) | Kt. to Kt. 2nd. |
| 23 B. to Kt. 5th. | B. to K. sq. |
| 24 B. to B. 6th. | B. to Q. Kt. 4th. |
| 25 Kt. to K. 2nd | White resigns. |
| 26 Q. to K. 3rd. | |

(a) The Book defence, when above odds are given, is P. to K. 3rd, followed by P. to Q. B. 4th.
(b) Threatening the annoying check with Q. at K. R. 5th.
(c) Had Kt. taken Q. P., Black would have played (9) B. takes Kt. P. (ch.), taking Kt. next move.
(d) Losing time apparently.
(e) Much better than R. takes R.
(f) Had White Castled here, Black would have played (19) Kt. to B. 7th, winning the exchange at least.
(g) These two "passed" pawns look very terrible.
(h) He seems to have no better move.