

his proceedings, called to his servant to bring him a pistol loaded, with which he shot the animal dead on the spot. This was probably the first time the leopard had tasted blood.

When an extra task is about to be imposed on an elephant, he is shown some favourite food, which he immediately takes it for granted that he shall receive as soon as his task is performed; he then exerts himself to perform it. This is a sort of principle of barter—give and take.

The fact whether swallows hibernate in this country has long been doubted, although it is evident that the Rev. Gilbert White, of Selborne, never abandoned the idea that such was the case. I have, however, received a communication from a highly-respectable quarter, which I will give *in extenso*, and which, I think, will put the question at rest, that swallows can remain in a dormant state in this country for many months without food, or the means of procuring it. The letter of my fair correspondent will speak for itself.

"I wish to communicate to you an interesting fact respecting a pair of swallows and their progeny, which came most strictly under my own observation, and also that of several members of our family. The birds built their nest early in the summer close to the iron stay of a water-spout, running in a direction from my bed-room window, so that I could observe their proceedings as I lay in bed, and also from various parts of my room. After the first hatch had taken flight, the parent birds repaired the nest and sat again. The young ones were brought to life in September, and were able early in October to leave the nest and settle on the spout, or the roof of the house. They took a short flight across the court, but were too weak to depart when the rest of these interesting birds quit our island.

"Having taken great pleasure in watching them, I was left to wonder how the young ones would manage, or whether they would be left to starve. To my great surprise, I found the old swallows carrying mud one morning, and most carefully closing the aperture of the nest when the young ones were in it. It was, indeed, most effectually stopped. As the spring of the year approached, I diligently watched the prisoners' habitation, and early in April I heard a slight twittering. This continued for some days, and I then inspected the nest, and found a small hole about the size of a pea. This day by day increased in size, and at length three swallows emerged from their winter habitation. At first they appeared weak, but in a few days they gained strength, and, after a flight, always returned to the same place, and rested there during the night. The nest has been preserved, and a brood has been hatched in it again this year, and another nest has been built on the next stay of the spout nearer to my window. My maid can vouch to the truth of the facts I have related."

Such is a copy of the letter I have received from a lady of the greatest respectability, and it may serve to set at rest any doubts which may have arisen as to the possibility of the hibernation of swallows in this country. It is an interesting question, and one which has often been discussed by naturalists. That young, tender birds should be able to go without food for so many months is certainly wonderful; but we know that some animals do so, such as mice, bears, crocodiles, &c., and probably several sorts of insects. A series of interesting experiments might be made on this subject, with the view of ascertaining, by artificial means, how low a degree of temperature swallows can sustain for a time without destroying life.

There is one thing in the above account which it is impossible not to admire, and that is the affection of the parent birds in providing for the safety of their young ones, when they were unable to accompany them in their flights to the sunny regions of Italy or to the groves of Greece.

EDWARD JESSE.

Fame.—The reverberation caused by something striking upon the empty world.

"No noose is good news," reprieved criminal said.

PASTIMES.

ARITHMOREMS

Names of historical men.

1. 1050 and *I run the tar* = An eminent theologian and reformer.
2. 550 " *after the rage* = A wise, learned and virtuous prince.
3. 1151 " *sew a nose* = A distinguished Portuguese poet.
4. 1050 " *oh, Jones, a sum* = An eminent lexicographer, critic, and essayist.
5. 1001 " *what tapers* = An early English historian.
6. 1251 " *shout brush rope* = An eminent navigator and discoverer.
7. 2006 " *a hue* = A Scotch historian.
8. 102 " *no east waris* = An illustrious philosopher and mathematician (English).

SQUARE WORDS.

1. A vulgar, pretentious person.
2. Those that do good
3. Not expected.
4. A beverage.

OLIVE.

CHARADES.

I am composed of 43 letters. My 37, 10, 4, 14, 25, 6, 28, 13, 29 is a lately deceased American author.

My 20, 3, 8, 27, 35, 15, 32, 30, 24, 36, is an American poet.

My 39, 5, 16, 30, 34, 9 is an American artist and poet.

My 1, 41, 27, 6, 7, 28, 13, 33, 22 was an American poetess.

My 21, 43, 19, 10, 2, 40 is an American poet.

My 23, 33, 34, 26, 12, 31, 27, 42, 32, 24, 11 is a sweet English poetess.

My 18, 38, 1, 16, 10, 30, 20, 17 is an English novelist and M. P.

My whole is a new poem and its author.

CASSIA.

2. A soldier gained my whole, For bravery shown in my second. By joining my first and third A colour 'twill then be reckoned. Reverse my whole, and then to you A household article I'll bring to view.

1. I am a useful article; change my head and I am still a useful article; again change, and I am a conveyance; again, and I am very pale; again, and I am an animal; again, and I am used in hot weather; again, and I am a man's name; again, and I am a woman's name; transpose me now, and I am still a woman's name.

RIDDLES.

1. If two things you wear, occur to your mind, The very same letters in both you will find.
2. In marble walls, as white as milk, Lined with a skin as soft as silk, Within a fount, as crystal clear A golden apple doth appear; No doors there are to this stronghold Yet thieves break through and steal the gold.

ANAGRAM.

Glaf fo het shoree how felt su reith rylog, Roneb roghuth thire tablet dlifes hundert dan melaf.

Abdelnoz ni gons dan deihlmeun niroyst,

Veaw roe su lal how ithrin hiret emaf!

Pu thiw rou rebann grith,

Lesprink tihw ryrast tligh,

Derpas sit ritia stemmeb form animotun ot reshio,

Hilew toughrh het gundinos kys

Dulo grins het tinnao's ryc,—

Oniun dna Bryleit! Nee roverme!

P. J.

ARITHMETICAL QUESTION.

Bought 200 pounds of tea and sugar for £14 13s. 9d., when the former was at 3s. 6d. and the latter at 4d. per pound. How much of each kind had I?

R. FULLERTON.

ANSWERS TO ARITHMOREM, &c. No. 47.

Anagrammatical Rebus.—*Hannibal. Saguntum.* 1. Holfernes. 2. Abyssina. 3. Nuremberg. 4. Nassau. 5. Ispahan. 6. Bridport. 7. Altenau. 8. Lamaism.

Arithmorem.—1. James Sheridan Knowles. 2. Thomas Carlyle. 3. William Hamilton. 4. Joseph Addison. 5. John Sheridan Le Fanu.

Square Words.—G A M E.
A D A M.
M A I M.
E M M A.

Transpositions.—1. Narcissus. 2. Dalia. 3. Forget-me-not. 4. Lily of the Valley.

Charades.—1. Bare-foot. 2. Transpositions. 3. Parent.

Puzzle.—*Cheat - heat-eat-teach-tea-hat-eche-acc-act.*

The following answers have been received:

Anagrammatical Rebus.—J. A. W., Carlos, Phemie, R. W., Flora, Camp.

Arithmorems.—H. H. V., Carlos, W. W., Phemie, R. W., Camp.

Square Words.—Carlos, J. A. W., Phemie, Fletcher, W. W., Camp, R. W.

Transpositions.—R. W., Flora, Nemo, J. A. W., Fletcher, H. H. V.

Charades.—Castor, Arden, W. W., Phemie, J. A. W., Nemo, H. H. V.

Puzzle.—Richard Y., X. Y. Z., Nemo, Alpha. Received too late to be acknowledged last. M. E. P., S. S. W.

CHESS.

The match between Herren ANDERSEN and STEINITZ is now a fixture; nor are Herr S's chances by any means hopeless. LOWENTHAL says "he is the coming man of the day," and that "the progress he has made (since his last matches), his youth and untiring energy, render the issue of the forthcoming struggle very uncertain, and precludes our pronouncing judgment in favour of the veteran Professor, or presuming to foretell what victories are in store for Herr STEINITZ.

TO CORRESPONDENTS.

PROBLEM No. 34.—Correct solutions received from St. Urban St.; Rook; and H. K. C.

PROBLEM No. 35.—Correct solutions received from St. Urban St., and Dr. G. S., Montreal; J. G. M., Toronto; H. K. C., Quebec; and M. N., Brighton.

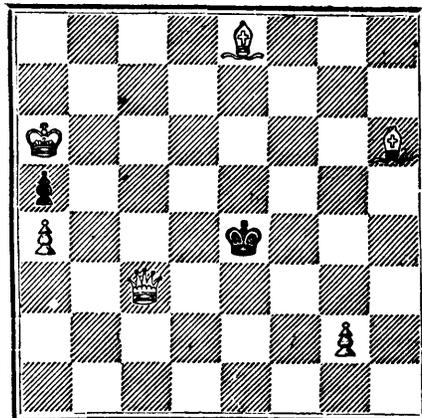
G. G., St. CATHARINES.—Your welcome enclosures were duly to hand. Will answer your enquiries by mail.

N. MARACHE, NEW YORK.—Thanks for you flattering notices of our column in the *Spirit*.

J. G. M., TORONTO.—Shall be happy to receive further favours. The game will appear in an early issue.

PROBLEM No. 37.

By GEORGE GROVES, ST. CATHARINES, C. W. BLACK.



WHITE.

White to play and Mate in three moves.

SOLUTION OF PROBLEM No. 35.

WHITE.

1. Kt to K Kt sq.

2. Kt to K R 3

3. Kt to K Kt 5 Mate.

BLACK.

K moves.

K to K B 2 or (α, β)

(α) 2. ————— K to Q 4.

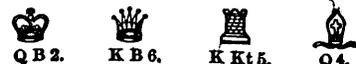
3. Kt to K B 4 Mate.

(β) 2. ————— K to K B 4.

3. B to Q 7 Mate.

ENIGMA No. 14.

FROM F. HEALEY'S COLLECTION.



Q B 2.

K B 6.

K Kt 5.

Q 4.

K 5.

Q R 5.

Q 4.

White to play and Mate in two moves.