

head. "Now which will you have, Nellie?" asked he, offering her the geraniums in one hand and the rose in the other.

Nellie hesitated, glanced up shyly, hesitated again, and then stretched out her hand to the rose.

"And I'll give my heart to my ladye's keeping,  
And ever her strength on mine shall lean  
And the stars shall fall, and the angels be weeping,  
Ere I cease to love her, my queen, my queen!"

sang Errol as they sauntered home through the old garden, with the shadows falling softly around them, the stars looking down, the calm majestic presence of the night sympathizing with the deep unutterable gratitude which filled their hearts with reverence and awe unspeakable.

SCIENTIFIC AND USEFUL.

**CREAKING BOOTS.**—Stand them in the salt and water over the soles for 24 hours.

A NEW method of preserving new manurial matters consists of mixing burnt gypsum with them and moulding into bricks.

**FLOOR OIL-CLOTHS.**—Have the dust wiped from them often; but use soap and scrubbing-brush seldom, as they wear off the paint. Use no hot water.

A HORSE left uncovered when not in exercise will soon grow a heavy coat of coarse hair. This becomes a hindrance to rapid motion, and should be prevented by judicious blanketing.

To detect nitric acid in wines it is necessary to saturate the wine with baryta and then distill; phosphoric acid is added to the residue and redistilled, when the acetic will be found in the distillate.

To CLEANSE MARBLE.—To cleanse marble stained with iron rust, apply lemon-juice to it with a clean rag and wash with warm water. If soiled with dirt, wash it with soap and Paris white.

**FURNITURE OIL.**—Mix half a pint of olive oil with a pound of soft soap. Boil them well, and apply the mixture to your oiled furniture with a piece of dry cotton wool. Polish with a soft, dry flannel.

FOR BLEACHING MUSLIN.—One pound of chloride of lime to forty yards of muslin; soak the muslin in soft water over night, melt the lime in a pot of water; then put the muslin in for half an hour; then rinse three times; soak in soft water over night; then hang out to dry.

To POLISH TINS.—First rub your tins with a dry cloth; then take dry flour and rub it on with your hands; afterwards, take an old newspaper and rub the flour off, and the tins will shine as well as if half an hour had been spent rubbing them with brick dust or powder, which spoils the hands.

An old umbrella supported on a stick driven into the ground affords an excellent shelter from the frost for small trees and shrubs. A galvanised iron cage of similar shape has recently been introduced for this purpose; it has only to be covered with cloth or paper to complete the arrangement.

**MUSTARD PLAISTER.**—In making a mustard plaister no water whatever should be used, but the mustard mixed with the white of an egg; the result will be a plaister which will "draw" perfectly, but will not produce a blister even upon the skin of an infant, no matter how long it is allowed to remain upon the part.

ALUM water applied hot is said to destroy red and black cockroaches, spiders, and all the crawling pests that infest our houses. The alum water should be applied with a brush to all wood-work where insects are suspected. Powdered alum or borax is useful for travellers to carry with them, to scatter about when they suspect there may be troublesome visitors.

An old farmer said: "When I die, I am going to leave behind me, as a heritage for my children, the home where they were born, made as beautiful as my means and educated taste would allow; pleasant memories of the home fireside, and of the sunny summer days, and a true regard for the dignity and worthiness of the calling which their father followed." It is a capital legacy.

A GOOD TABLE SAUCE.—Take one gallon of tomatoes, wash and simmer in three quarts of water until nearly done; strain through a sieve; add two tablespoonfuls of each of these spices, ginger, mace, black pepper, allspice and salt, and one of cayenne pepper; boil down to one quart; pour in one-half pint best vinegar, and then pass through a hair sieve. Bottle in half-pint bottles; cork and seal securely, and keep in a cool place.

M. GAUDIN has been making experiments to supersede borax, which is generally employed in soldering, and the result is that he finds that an excellent flux for soldering iron, and brazing copper and aluminum bronze, is obtained by a mixture of equal parts of cryolite and chloride of barium. Cryolite is a product and export of Greenland, and consists of a double fluoride of aluminum and sodium.

M. MILNE-EDWARDS, the well-known Parisian naturalist, has been studying *melanisms*, or the influence of climate in producing a black hue in the plumage of birds. He observes that the quantity of black in their feathers is regulated

by the regions in which they live, the tendency to *melanisms* being chief noticeable in the southern hemisphere, and particularly in New Zealand, Madagascar, and New Guinea.

**VARNISH BY EVAPORATION.**—Gutta-percha solved in ether is said, by Dr. Hoffman, to make an admirable transparent varnish for pictures and other sensitive objects of taste. Upon being applied to a surface the ether evaporates, leaving an exceedingly delicate and scarcely visible film, which can be washed with a moist cloth without harm. Applied to fine drawings through a vaporizer, this composition renders them ineffaceable.

**CLEANSING LACE.**—Point, or any kind of fine lace, may be cleansed easily by soaking it in a preparation of sapoline and warm water. If this is not procurable, ammonia may be used with almost equal effect. Let it soak till fit to rinse in pure warm water; then lay it on the ironing-board over clean linen, and iron lightly on the wrong side with a cool iron. Afterward pin the lace on the linen-covered board, inserting a pin in every open loop to keep the pattern clear.

How to KEEP BUTTER COOL.—Get a large flour pot, plug up the hole with a sound cork and seal it. Now put a quarter-brick or other square, heavy body in the bottom, to serve as a support for a second, but smaller pot, which must be plugged up in the same manner. Place a dish under the outer pot, and cover with any cover you please, provided it be not metallic. Now fill the space between the inner and outer pot with water. The butter will keep as firm as a rock, as cool as a cucumber.

In the Transactions of the Highland Agricultural Society various waste residues are described as important. Blood may be used as manure; it contains one per cent, of phosphoric acid. Flesh, fish, hair, wool, and glue refuse may be used, as also the "trotter-scotch" from tanneries, a mixture of skin and hair. Refuse hops contain from two to four per cent, of potential ammonia. Sugar-boilers' scum contains both nitrogen and phosphates.

**ENGRAVING IN RELIEF.**—This is a substitute for wood engraving by deepening or hollowing out by means of acid the parts usually cut to the full depth required with a graver. The drawing is etched on the plate, and the raised parts obtained by a deposit of metal, then the parts in relief are covered with an acid resisting varnish, and the remaining parts are hollowed out to the required depth by means of acid, this process being repeated as often as necessary for producing the greatest depth required.

YOUNG engineers will find the following recipe a good one for polishing the brass-work of their engines. Rub the surface of the metal with rottenstone and sweet-oil, then rub off with a piece of cotton flannel and polish with soft leather. A solution of oxalic acid rubbed over tarnished brass soon removes the tarnish, rendering the metal bright. The acid must be washed off with water, and the brass rubbed with whiting and soft leather. A mixture of muriatic acid and alum dissolved in water imparts a golden color to brass articles that are steeped in it for a few seconds.

**GLYCERINE AND CASTOR OIL.**—The Philadelphia Medical Times has an article on this subject. It is stated that if castor-oil be mixed with an equal part of glycerine and one or two drops of oil of cinnamon to the dose, it can scarcely be recognized. The writer affirms that he has used this mixture a great number of times, and can confirm all that has been said of it. Children take it out of the spoon without difficulty, and it has been given to doctors without their discovering that they were taking castor-oil. This hint may be well worth acting upon, considering the nauseous character of castor-oil to most persons.

**IMPROVED WOOD FENCE.**—The stakes are used in pairs, set at such an inclination toward each other that they intersect or cross, and are placed at the usual distance apart to form a panel of fence. A rider is supported in the angles formed by the intersection, and an upright is placed centrally between each pair of stakes, with a rider extending across the top ends thereof. Braces are attached to the stakes at one end, while the other end rests beneath the lower angle of the latter, on the rider. The uprights are connected with the stakes by slats, and placed at an angle of fifteen degrees with the surface of the ground. Rails rest on these slats, and their ends lap past each other by placing them on opposite sides of the uprights. The fence is said to be straight, and proof against unruly stock, as well as high winds.

**DIPHTHERIA.**—A remedy for diphtheria has been brought prominently before the public in Victoria, Australia, by Mr. R. Greathead. In the first instance, Mr. Greathead offered to communicate to the Government a sovereign remedy for diphtheria, in consideration of a reward of \$5,000. The matter was referred to the chief medical officer, Dr. McCre, but there were manifest difficulties in the way of testing Mr. Greathead's method; and the Government, of course, declined to enter into the speculation which he had invited. Thereupon, Mr. Greathead made public his remedy, which consists simply of the administration of four drops of pure sulphuric acid in a tumbler of water. Cases have since been reported in which the supposed specific is alleged to have operated successfully, but the cures have not been authenticated by medical men, and the value of the remedy is still a matter of doubt amongst laymen.

CAISSA'S CASKET.

SATURDAY, May 2nd, 1874.

\* \* \* All communications relating to Chess must be addressed "CHECKMATE," London, Ont.

TO CORRESPONDENTS.

J. A. RODIER.—Your solution of No. 56 is quite correct. Should be pleased to hear from you regularly.

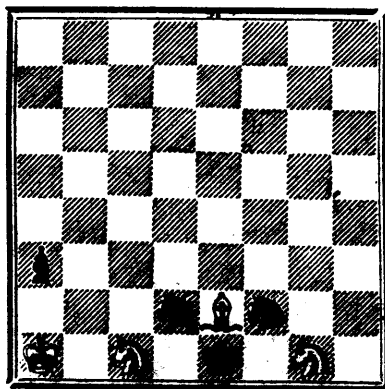
J. W. STANSTAD.—The documents have been distributed as directed. Cannot promise the Association much from London. A prob. now and then for the Casket would be in order.

CAISSAN CONUNDRUMS.

No. 59.

BY L. T. BROWN.

BLACK.



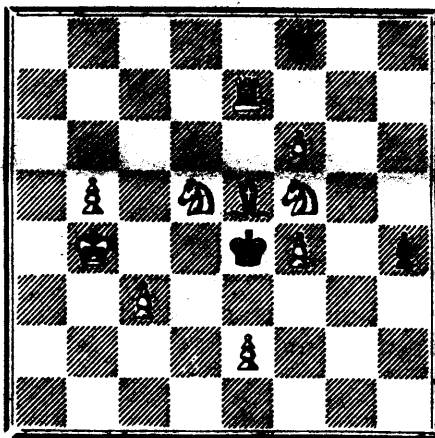
WHITE.

White to play and mate in two moves.

No. 60.

BY MISS ELINA JANE HALL.

BLACK.



WHITE.

White to play and mate in three moves.

CONUNDRUMS ORIBBLED.

No. 51.

White. Black.

- 1 B to K B 6th
- 2 Mate acc.
- 1 Any

No. 52.

White. Black.

- 1 B to Q B 4th
- 2 Q to Q 5th, ch
- 3 Kt or Q mates
- 1 K takes B
- 2 Any

(a.)

- 2 Q to Q 1st
- 3 Q mates
- 1 B takes B, etc.
- 2 Any

(b.)

- 2 Q to K 1st, ch
- 3 Mate
- 1 B takes Kt P
- 2 Moves

(c.)

- 2 P takes B
- 3 Mate.
- 1 R to Q or K 5th
- 2 Any

CAISSAN CONTESTS.

No. 26.

An elegant little affair contested some years ago between Messrs. Neumann and Schulten.

Ruy Lopez Kt.'s Game.

White. Black.

- Mr. N. Mr. S.
- 1 P to K 4th 1 P to K 4th
- 2 Kt to K B 3rd 2 Kt to K B 3rd
- 3 B to Q Kt 5th 3 B to Q 4th (a)
- 4 P to Q B 3rd 4 K Kt to K 2nd
- 5 Castles 5 Castles
- 6 P to Q 4th 6 P takes P
- 7 P takes P 7 B to Q Kt 3rd

- 8 P to Q 5th 8 Kt to Q Kt 1st
- 9 P to Q 6th 9 Kt to K Kt 3rd (b)
- 10 P to K 5th 10 Kt to Q B 3rd
- 11 K R to K 1st 11 K R to K 1st
- 12 B to K R 5th 12 P to K B 3rd
- 13 B to Q B 4th ch 13 K to R 1st
- 14 P takes K B P 14 K takes R, ch
- 15 Q takes R 15 P takes K B P
- 16 Q to K 8 ch, and wins (c).

NOTES.

- (a) Probably the worst defence to the Ruy Lopez that can be adopted.
- (b) P takes P is the proper move.
- (c) A beautiful and unexpected coup, which forces mate in a move or two.

It is to be regretted that Mr. Neumann, who, a few years ago, was looked upon as second to no player in Europe, should have so completely retired from the Chess arena, his name nowadays being rarely to be met with, even in the German and Austrian Chess magazines.

No. 27.

A smart little game recently contested in the Chicago Chess Club.

Bishop's Gambit.

White. Black.

Dr. Spencer. Mr. Hosmer.

- 1 P to K 4th 1 P to K 4th
- 2 P to K B 4th 2 P takes P
- 3 B to Q B 4th 3 P to K B 4th (a)
- 4 Q to K 2nd 4 Q to K R 5th, ch
- 5 K to Q 1st 5 P takes P
- 6 Q takes P, ch (b) 6 B to K 2nd
- 7 Kt to K B 3rd 7 Q to K Kt 5th
- 8 R to K 1st 8 Kt to K B 3rd
- 9 P to Q Kt 4th (c) 9 P to Q R 3rd
- 10 B to Q Kt 2nd 10 K to Q 1st
- 11 B takes Kt 11 R takes B
- 12 Q takes K R P 12 R to K 1st
- 13 Q to K 4th 13 P to Q 3rd
- 14 Kt to Q B 3rd 14 B to K B 4th
- 15 Q to K 2nd 15 Kt to Q 5th (d)
- 16 Kt takes Kt 16 B to K R 5th (e)

And White resigns.

NOTES.

- (a) A defence recommended by Philidor.
- (b) Mr. Neuman's move of Kt to Q B 3rd appears to be the strongest mode of proceeding with the attack.
- (c) A novelty, and one which appears worth consideration.
- (d) An excellent coup, to which there seems to be no satisfactory reply.
- (e) This brilliant stroke of play changes in a moment the whole aspect of the game. White must now lose his Queen or be mated.

CAISSAN CHIPS.

We conclude our labors by gathering the "chips." It has been suggested that we open a correspondence tournament, and publish the games in the FAVORITE. How many of our readers think the coming season not too sultry for such a contest? Let us know at once.

Brother Brownson and good lady playing at chess forms the handsome picture that adorns the cover of the greatly improved, handsomely-printed Duquesne (Iowa) Chess Journal, for April.

Have we informed our readers of the painful event—the death of Ernest Morphy? Apoplexy carried off this able chess writer and his demise occurred at Quincy, Illinois on the 7th ult.

The Chess Journal presents to the world a new variation in the "slow" opening, called "Jerome's double gambit." It will in all probability prove to be practically, as it certainly is theoretically, unsound. The sacrifice of a Bishop and a Knight so early in a game as the 4th and 5th moves, can hardly be expected to afford equivalent advantage in position. After further examination we may possibly republish it in the FAVORITE, should we not see what we expect to see.

THERE is a story told about Holbeck Lunds chapel in Wensleydale, that some years ago, when the small bell in the little turret was either missing or broken, the clerk used to come down to the chapel on Sunday at the usual hour, and, thrusting his head through the hole where the bell had hung, cry out lustily, "Bol-lol, bol-lol, bol-lol!" in order to summon the parishioners to service.

In a pool across a road in the county of Tipperary is stuck up a pole, having affixed to it a board with this inscription:—"Take notice that when the water is over this board, the road is impassable."

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