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SCIENCE JOTTINGS.

BY DR. ANDREW WILSON.

Now that the holiday season is upon us, I presume my readers will be scattered far and wide over the land—fishing in Norway, climbing mountains in Switzerland, shooting on the moors, and otherwise endeavouring to recuperate body and mind for the more serious business of life. Reflections on the best method of spending a holiday have been indited from time immemorial of course, but, as far as I can observe, with but scant success. For holidaying, like most other earthly things (including digestion) is a strictly relative matter. What suits one won't please another; it is impossible to lay down any but the most generalised rules for the proper observance of one's leisure time, and we all know how extreme generalisation thins itself out, in the long run, into sheer nothingness. Personally, I confess to a strong liking for the society of my fellow-men. I prefer Brighton, for instance, to some sequestered seaside nook, and I confess to finding extreme pleasure in watching the antics of old and young at Margate or Yarmouth—a confession, I know, which will stamp me at once as a veritable Philistine in the eyes of those æsthetic persons who hate crowds, and who prefer to survey life from a balcony. Be it so; only I should not dream of recommending my prescription to other people, any more than I should insist on advising a man who is upset by the sea to try a yachting holiday, or on setting an ardent golfer down somewhere or other with links ten miles off.

Only, I am convinced that many of us do not get all the good we might obtain from our rest, because we do not choose that mode of life which best suits our ways and ideas. Many a man thinks it a bounden duty to stow himself away in a dreary silent resort, where there is "nothing to do" and little to see, and where, when he has read his morning paper, the rest of the day is spent in—well, yawning, and indulging in the vain desire to get back to town. Surely we can get fresh air and rest and change without laying ourselves open to ennui; and hence my plea for a better consideration of the question where to go for holidays. One point always strikes me as irrelevant and foolish—namely, that people will often leave comfortable homes and will stow themselves and their families in houses which are devoid of all comfort and, what is worse still, of sanitary arrangements. Then they wonder why their holiday has not effected all the good that was expected of it, and where this typhoid, or that attack of measles, was contracted. This is a serious business, only things are getting better now—thanks to the increased attention paid at health-resorts to drainage and other essential matters.

The recent cholera scare need not, I fancy, deter people from going on the Continent—that is, the Continent most of us know. Farther east there may be danger—indeed, there always is—from defective sanitation, when the cholera season is upon us. I would add, never drink water abroad when you can help it. Lest it be thought I am encouraging habits of intemperance, I would say, follow my plan, and when you go abroad drink Apollinaris or Godesberger water. You pay for it, but then it is better to pay a small sum for prevention than a big one for treatment of typhoid. An old Scotchman once remarked to me that he had never experienced any ill effects from drinking water in Paris in summer or elsewhere, but then he added the observation that he always qualified the water with the wine of his country, which, he remarked, "You'll admit is very destructive to germs"! All the same, we are not all lovers of "mountain dew," and I advise my readers to drink a pure mineral water abroad in preference to any native product, and, above all things, to avoid the siphons of aërated water which most of the hotels furnish. They are deadly inventions, and, I believe, along with the *carafes frappées*, are the cause of much illness from the impurity of the water and ice they respectively contain.

One of the most important books of the season, from a scientific standpoint, is that just published on "The Diseases of Occupation," by Dr. Arlidge. I have read it with much interest and a corresponding meed of instruction. It is a curious study this, which shows how diseases of a special kind follow on the footsteps of the trades and occupations incidental to civilisation. What Dr. Arlidge has to say about the "grinders" of Sheffield with their shortened lives, and about "dusts" at large breathed into the lungs of workers, is worthy the study of everybody. If certain diseases follow upon certain occupations, limited as these diseases are to-day by improved sanitation, it is curious to note that even our amusements may bring specific ailments in their train. What are we to say to "horse-rider's sprain" or to "lawn-tennis elbow," both being ailments well known to surgeons? Then the ballet-dancer's big toe is liable to assert itself as a consequence of her art, and there is also a trouble known as "dentist's leg," produced by the cramped posture in which that gentleman has to work. Even coal-miners are liable to a peculiar affection of the eyes, due to the cramped position in which they often work. It is, I repeat, a curious study, this, of the industrial diseases of our time, and one to which we may be glad to notice that increased attention is being paid.

A correspondent invokes my aid in exposing what must certainly, as he puts it, be regarded as a deliberate fraud upon consumers of condensed milks. When anyone buys a tin of condensed milk, he naturally expects to purchase ordinary preserved milk containing all the constituents of that fluid. Yet it seems that commercial ingenuity has been equal to the task of defrauding the public by substituting, for the pure article, condensed "skim" milk, from which the fat—so important an element in nutrition—has been removed. If we reflect upon the extent to which condensed milk is used in the feeding of infants, and especially the children of the poor, the deprivation of fat to which I allude becomes, medically speaking, a most serious matter. It is a fraud which has the worst consequences, in that purchasers are not merely wronged as regards the money paid for what they assume to be milk of full nutritive value, but also as regards the health of those who have to depend on the milk for their nourishment.

Doubtless manufacturers are compelled to label their condensed "skim" milk as such, but we all know there are ways and means of labelling which simply defeat the object of legislation and delude the customer, who in no case, surely, could possibly prefer "skim" milk to that of full strength. "Skim" milk should not be labelled "milk" at all. That is the only remedy for the abuse of the name, and I hope to see it applied in due course. Then there is yet another piece of ingenuity to be noticed in connection with condensed milks. Some tins are labelled so as to make it appear that they contain goat's milk. Here a popular error is fostered. Swiss condensed milk itself, is not goat's milk. It is cow's milk, and there is no difference to be detected between average Swiss milk (cow's) and English milk. But the chief cause of complaint is the selling of condensed "skim" milk for the full-bodied article; and it is desirable that the delusion about goat's milk should be also banished from the public mind.

CHESS.

TO CORRESPONDENTS.

Communications for this department should be addressed to the Chess Editor.

F KELLNER (Leipsic).—Your problems have arrived, and shall receive our earliest attention.

C BURNETT (Biggleswade).—You do not say in how many moves your new problem is to be solved, but the key you give, Black's reply of Kt takes P (ch), seems to stop any mate in less than five. The amended position of the other is under examination.

DR F ST (Camberwell).—Your last three-mover can be solved by 1. K to B 3rd or 1. R to B 6th, if, indeed, there are not more.

W P H (Seaford).—The two-mover is a very neat composition, but you do not give the name of the author.

J F MOON.—We are obliged for your contribution, which shall be reported upon at an early date.

G K ANSELL.—Your position is neatly constructed, but we are receiving problems by the dozen with precisely the same move and play. The idea of the Queen mating in the fashion you employ was exhausted twenty years ago.

W P HIND.—We cannot see the likeness beyond the first move. Your problem was discarded on account of the B B at Q R sq, and B P at Q Kt 2nd—a palpable impossibility.

COLUMBUS.—Problem to hand, with thanks.

J SMITH (Mullbrook, Jersey).—In No. 2517, if Black play 1. Kt to Q B 3rd, White mates by P takes P.

B W LA MOTHE (New York).—Thanks for problems, which we shall examine with careful interest, and also review our criticism of the last.

CORRECT SOLUTIONS OF PROBLEM No. 2515 received from S D Hill (Indian Orchard, Mass.); of No. 2517 from J W Shaw (Montreal); of No. 2519 from W H Thompson (Teneriffe) and Captain J A Challice; of No. 2520 from L Desanges, J C Ireland, A W Hamilton Gell (Exeter), Captain J A Challice (Great Yarmouth), Dr F St, Bluet, and F C Hands.

CORRECT SOLUTIONS OF PROBLEM No. 2521 received from C E Perugini, Dr F St, J F Moon, Bluet, R H Brooks, W Percy Hind (Seaford), Joseph Willcock (Chester), H B Hurford, J D Tucker (Leeds), W R B (Plymouth), F J Knight, W R Raillem, C M A B, Admiral Brandreth, Martin F, Shadforth, William Guy, jun (Johnstone), B D K, H S Brandreth, T G (Ware), H J Lane, J Coad, G Joicey, A L Jones (Belfast), E Louden, G T Hughes (Waterford), Sorrento (Dawlish), E E H, J B Baxter (Perth), Dr Waltz (Ostend), A Newman, R Waters (Canterbury), Mrs Wilson (Plymouth), L Schlu (Vienna), W Vincent, J R Dow, T Roberts, Mrs Kelly (of Kelly) W F Payne, Columbus, Alpha, J Ross (Whitley), W Wright, and A W Hamilton Gell.

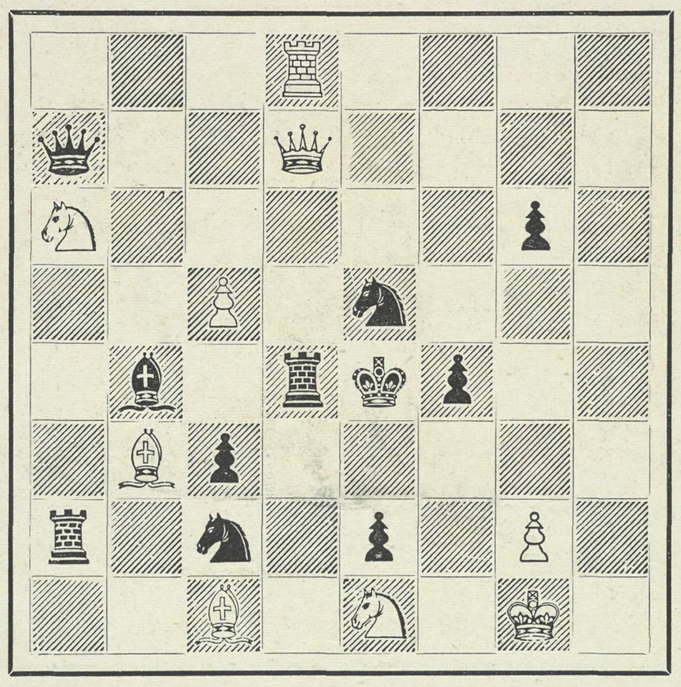
SOLUTION OF PROBLEM No. 2519.—By J. S. THORNS.

WHITE.	BLACK.
1. Kt to B 6th	Any move
2. Mates.	

PROBLEM No. 2523

By DR. F. STEINGASS.

BLACK.



WHITE.

White to play, and mate in three moves.

CHESS IN GERMANY.

Game played in the Dresden tournament between Messrs. WINAWER and ALAPIN.

(*Ruy Lopez.*)

WHITE (Mr. W.)	BLACK (Mr. A.)
1. P to K 4th	P to K 4th
2. Kt to K B 3rd	Kt to Q B 3rd
3. B to Kt 5th	P to Q R 3rd
4. B to R 4th	P to Q 3rd
5. B takes Kt (ch)	P takes B
6. P to Q 4th	P to B 3rd
7. P takes P	B P takes P
8. Kt to B 3rd	Kt to B 3rd
9. B to Kt 5th	B to K 2nd
10. Q to Q 2nd	B to K 3rd
11. Castles (Q R)	

This is difficult to understand. Castling K R is quite safe, and answers his purpose, but to Castle on the Q side in face of an open file for his opponent's Q R seems tempting fate.

11.	Kt to Q 2nd
12. B to K 3rd	

B takes B would have prevented the resistless combination which Black's Bishops make presently.

12.	Castles
13. Kt to K sq	Q to Kt sq

With the better game clearly in hand, Black now commences a well-sustained attack on his opponent's weak spot.

14. P to Q Kt 3rd	P to Q R 4th
15. P to B 3rd	Q to Kt 2nd
16. Kt to R 4th	P to B 4th
17. Kt to Kt 2nd	Kt to Kt 3rd
18. P to Q R 4th	P to B 3rd
19. Q to B 2nd	Kt to Q 2nd

The moves in this part of the game are played with admirable precision by Black, whose object clearly is to advance his centre Pawns, while White is equally anxious to prevent it.

WHITE (Mr. W.)	BLACK (Mr. A.)
20. Kt (K sq) to Q 3rd	Q to R 3rd
21. P to Q B 4th	Q to Kt 3rd
22. K to B 2nd	Q R to Kt sq
23. Kt to B sq	Q to Kt 2nd
24. Q to Q 2nd	P to Q 4th

An excellent move, that opens up a splendid attack

25. Q to Q 3rd	Kt to Kt 3rd
26. R to Q 2nd	Kt takes B P
27. Kt takes Kt	P takes Kt
28. P takes P	Q to R 3rd

Q to Kt 7th (ch) might now have been played, followed by Q to Kt 5th, attacking both R P and B P.

29. Q to B 3rd	Q takes P

A fatal blunder! He should have played R to Kt 5th, and, in reply to Q takes P, Q takes P (ch), &c., we believe, should win without much trouble.

30. Q takes Q	B takes Q
31. R to Q 7th	

White has now got over his difficulties, and luckily wins a game that he certainly ought to have lost.

31	R to B 2nd
32. K R to Q sq	B to B sq
33. R to Q 8th	R (B 2nd) to Kt 2nd
34. B takes P	R takes R
35. R takes R	R to K B 2nd
36. Kt to Q 3rd	B takes Kt
37. K takes B	P to Kt 3rd
38. K to B 4th, and wins.	

The meeting of the Counties Chess Association at Brighton met with a well deserved success, and attracted a good attendance of amateurs and the public alike. Additional interest was excited by the presence of the Rev. G. McDonnell, Mr. Gunsberg, and Herr Lasker, who during the week gave exhibition matches in various forms, to the delight of the chessplaying visitors.

The International Chess Congress at Dresden has given further proof of the exceptional skill of Dr. Tarrasch, who for the third time in succession wins the chief prize in a great masters' tournament. The merit of this unique performance is enhanced by the fact that in all these contests he has lost but a single game, which we published a fortnight back, an unprecedented record in first-class play. A meeting between the Nuremburg physician and Mr. Steinitz would arouse the liveliest feelings in chess circles, and a much finer struggle than any yet fought might be reasonably anticipated. Belonging to the same school as Steinitz, and with as fine a sense of position, Dr. Tarrasch has the advantage of years, and if anyone is capable of bringing the world's championship back to Europe he is the man. Special mention ought also to be made of the fine play of Herr Walbrodt, of Berlin. Although not yet twenty years of age, he more than held his own amongst the masters, and ultimately tied for the fourth and fifth prizes with a score of 10. When it is remembered $10\frac{1}{2}$ took the second prize, this total means more than his position on the prize-list fully represents, and practically makes him as good as anybody but Dr. Tarrasch. With ability so promising, Herr Walbrodt's chess future will be closely watched. The English players did not show to much advantage. Mr. Blackburne takes a special prize for the best score against the winners, and there ends England's interest in the awards. Mr. Mason at one time looked formidable, but lost ground towards the end, whilst Mr. Loman all through was palpably below form.

THE LADIES' COLUMN.

BY MRS. FENWICK-MILLER.

The wedding of the heir of the Duke of Devonshire was as "smart" a function as was anticipated. The bride's going-away dress was very pretty; it was in pale-blue soft material, the bodice almost covered with folded white crêpe de Chine, and finished with revers of white moiré antique. Lady Evelyn received a great number of presents of jewellery. Her father is the Viceroy of India, and his staff sent a bangle with heart-shaped brilliant centre. The Marquis of Lansdowne himself gave his daughter a pearl and a diamond necklace; one of her aunts sent a necklace of the two stones combined, and the Duke of Devonshire a splendid three-row pearl necklace. The Duke of Westminster's present was a very uncommon necklace of white enamel olive leaves, with setting of brilliant points and pink topaz. Besides the jewellery now given her, however, Lady Evelyn Cavendish will have at once a large quantity of precious stones which have been bequeathed direct by the late Duke of Devonshire to his grandson, the bridegroom. It will take a long time for this over-rich young lady to so much as know the contents of her own jewel-cases! I say "over-rich" because, after all, an English lady cannot (an she would) bedeck herself with innumerable gauds, as though she were a Hindoo idol; and so many necklaces, brooches, bracelets, and rings as Lady Evelyn Cavendish now possesses are useless, except to afford mere variety, which is a doubtful pleasure. I suppose it occurs to most of us to make favourites of some among even a small stock of personal ornaments: some are worn constantly, others are hardly ever taken out of their cases.

It has amused me much to see the difficulty that many journalists seem to experience about the titles of English ladies in the case of marriages such as this one. A great London daily sent a reporter who knew no better than to speak of the going-away dress of "Lady Victor Cavendish"; and another improved even on that by depriving her of her courtesy title altogether, and speaking of "Mrs. Victor Cavendish"! Of course, a marquis's daughter marrying a "Mr." retains her own Christian name, with the title of "Lady" before it, and her husband's surname to follow. This should be known even to reporters, since it is not "specialised" knowledge, so to speak, like descriptions of ladies' dress. Most men are absolutely incompetent to write about frocks, and the poor things flounder dreadfully when they attempt it. Not from what the doctors call congenital incapacity—that is, being born so—for when the great male mind applies itself to chiffons it can master them. Some of our very best dressmakers and the buyers and managers of millinery and drapery establishments are men. Think of the great Worth at Paris, or Mr. Joyce at Russell and Allen's! Even as far as literature goes, where is there a writer with a finer appreciation of flounces and furbelows than "The Lazy Minstrel," whose poems have just reached the well-deserved honour of a shilling (and eighth) edition? One can see the pretty gown that Mr. Ashby-Sterry so accurately describes as "The Pink of Perfection"—

It must not remind you of raspberry ice,
Nor cheek of a milkmaid or cotter;
A lobster-like redness is not at all nice,
Nor feverish glow of the blotter.

A strawberry crushed, almost smothered in cream,
Nearly matches the colour, it may be;
The Jungfrau just flushed with the earliest beam,
The hue of the palm of a baby.

This frock, when it's made with most exquisite taste,
And fits like a glove on the shoulder,
With yoke and full pleats and a band at the waist,
Will gladden the passing beholder.

There it is, you see, in rhyme, and graceful and polished rhyme too, and yet a perfect picture of a little frock, colour and make too. But such skill is rare, very rare, in men, and the stuff which is printed by some journals as descriptive of ladies' dress is both perfectly useless and too funny. "Here was pale-blue combined with watercress-green, and worn with a black hat with yellow roses, next to a black and white check with brown velvet waistcoat. Close by one saw a flowered muslin with crushed strawberry trimmings, and a peach-coloured soft material relieved with brown, and worn with a big white lace hat." This uncouth jumble of verbiage is no joke from my imagination, but is what a great London daily paper seriously offered to its lady readers as descriptive of the frocks at a smart race meeting. There was half a column of this useless stuff.

Men should comprehend that women read descriptions of dress just as men read the City article—not for fun, but for business purposes. No women finds it particularly amusing to read about styles and stuffs, but it is intensely interesting because it is imperatively necessary when she is going to have a new frock or bonnet herself. John Stuart Mill remarked that the amount of observation and reflection that a lady had to bestow on having her own and her children's costume all that it should be might suffice, if otherwise applied, to produce really great results. This is quite true; and sad enough it is, when you look at the matter from the serious standpoint, that we should have to waste our time so utterly. But from the practical, worldly point of view, to consider costumes is by no means waste of time. Until we wear a uniform, every woman who wants to hold her own socially (and to do this is the main duty for the average woman) must give thought to make her various costumes suit her person, agree with her purse, and march with the fashion. For these ends, descriptions of dresses and hints on styles are eagerly read by women. But, in order to be of any use, such descriptions must be done by "expert" hands, and must be sufficiently detailed to be followed.

So long as there is so great a choice of fabrics, and such variations in style, and such scope for individual (good or bad) taste in dress, the subject must absorb a considerable share of women's thoughts and of the space in papers and "columns" devoted to feminine affairs. It is needed. This must be my answer to the three kind correspondents, who have all written to me (by a curious coincidence—what Wendell Holmes calls a "thought-wave") in the same week stating that they prefer this column in those weeks when it has but little about dress in it. As Macaulay said when the editor of the *Edinburgh Review* objected to the meretricious glitter of his style: "I may not altogether disagree with you personally, but the angler is not determined in his choice of a bait by his own taste but by that of the fish." Undoubtedly women must care for, and therefore must be given news about, the fashion of dress. The only way to avoid any particular trouble on that head would be to do what men have, in fact, almost done in this age: adopt a uniform costume, scarcely differing from year to year, and hardly marking the distinctions of wealth and caste. But how to achieve this end? Even the power of mighty Elizabeth failed to secure the prolonged observance of the sumptuary ordinance which she passed in 1574, requiring everybody to dress according to a pattern approved by the Queen. How much less chance is there for such laws to-day! Besides, I don't really think there is a demand for them. The only novelty and variety that many women get in life comes by a new cut in bodices and a fresh colour in bonnets!