(Written for the Canadian Illustrated News). OUR FISHERIES.

As the time approaches when the assembled wisdom of our Dominion will be called upon to pass upon the section of the Treaty of Washington, relating to the above mentioned nationally important subject, the necessity appears to us urgent, that the light of public opinion should be fully concentrated upon, and declared in the premises. Hitherto, the weight of argument as developed through the medium of the press, seems to have been adverse to the ratification of the section to which reference is made; and yet, mildly deprecating such general conclusions, we now beg to suggest, in the interests of onr young nationality, that perhaps the picture may have its obverse side. Of course, we have been unpleasantly disturbed by the proofs of the undisguised covetousness of our American Cousins, in trumping up claims to our inshore fisheries; and this, after solemnly renouncing the same fifty three years ago. Of course, our duty and moral courage require us to throw the Tenth Commandment in their teeth; but at the same time, it may be expedient to keep sufficiently cool, so as to enquire whether our substantial interests should not lead us to gratify, for this once, their special weakness for codfish, mackarel and herring. Wait, Dear Reader, and don't fly in a passion! Just listen! They, I mean our covetons cousins aforesaid, in their nervous haste, have only looked to present advantage, and thus have failed to observe the perpective, to its vanishing point. Look at this! Our fair sized fishing craft, for instance of 400 tons, presently cost us about \$4,000 each; and the outfit, including all the needful supplies for a "vige," probably about \$1,000 more, in our market: while at the same time, a similar vessel, built on the New England shores, would, owing to their high tariff, cost at least \$6,000 and the same supplies at least \$1,500 in addition. And it matters not, whether the crews are shipped at " seamen's wages," or "on shares"; this circumstance cannot in the least affect the proportion as to cost. And here is the result. Assuming, from information furnished by our friend Captain Salt, that every quintal of cod for instance, caught and cured ready for market, costs us \$4 on the average; then the same would cost American fishermen exactly \$6 per quintal, as in proportion to their extra outlay. And next, both of us are to sell in the same unlimited market, without restrictions; and the margin of difference in the cost of the "catch," represents profit for us Canadians. What follows? Why the moment the truth of the case penetrates the leathery, weather-beaten skin of a Gloucester man, thereafter, he is bound to either build or buy his schooner, as well as his entire outfit, in some of our Canadian ports, in order to secure the 50 per cent. profit. Ten to one if he does not, in a few years, forget Cape Cod and Ben Butler, and become naturalised in Quebec, or St. John; whither a legion of his fellow cormorants, I beg pardon! I meant comrades, will speedily follow him. Now, my patriotic but simple-minded friend! will it hurt us very much to have all of the capital, craft, and enterprise, at this present writing invested in the American fisheries transferred to our Dominion? Will not these items go far to balance the account, even supposing our "Fish Crop" is worth \$5,000,000 a year? And now, leaving out all considerations of national safety, let us consider one or two specifications, to wit:

- 1. One of our cleverest statesmen "assisted" at the Treaty, and most assuredly must have seen the point.
- 2. We have reason to believe that the policy of our Ottawa Cabinet will be to ratify.
- 3. Our Beloved Queen, in a truly maternal and considerate manner, has requested us to consent.

For such reasons, and such specifications, we cast our vote unreservedly, "hook and line, bob and sinker," for the immediate ratification of "The Treaty of Washington."

W. R. D.

The fisheries, though nominally the property of the Dominion, really belong to the Provinces on which they border. We do not, therefore, advocate the sacrifice of Nova Scotia fisheries to advance the price of Ontario wheat. If the maritime Provinces are satisfied that the opening of the American market to them is a sufficient return for the freedom of the fisheries, then let the clause of the Treaty relating thereto be ratified by all means! but if not, then we say decidedly not, whatever may be the consequences. We are all at liberty to dispose of our rights for the sake of our interests, but the proceeding is seldom attended with honour. In this particular case, however, there would be doubtless great honour to the Dominion in making a surrender of exclusive right for the sake of peace between England and the United States, provided the "right" given up were compensated for by an equable contribution to Dominion interests. Of this the people of the Maritime Provinces are the best judges. Without endorsing our correspondent's conclusion, we think his arguments worthy serious consideration; and we shall heartily adopt his conclusion too, if it meets the approval of the "dwellers by the sea," whose property is at stake.-En. C. I. N.]

"THE NEW ZEALANDER."-Mrs. Florence Marryat Church writes :- "The fame of Lord Macaulay's 'New Zealander' having almost passed with us into a 'household word,' I think I may be excused for calling the attention of your readers to

the following passage from Captain Marryat's novel, Frank Mildmay, or, the Naval Officer: - There was a beauty, a loveliness, in these venerable ruins which delighted me. There was a solemn silence in the town; but there was a small still voice that said to me, 'London may, one day, be the sameand Paris; and you and your children's children will all have lived, and had their loves and adventures; but who will the wretched man be that shall sit on the summit of Primrose Hill, and look down upon the desolation of the mighty city, as you, from this little eminence, behold the once flourishing town of St. Jago.' Lord Macaulay's words were published in 1840; my father's in 1829."

TO SMOKE OR NOT TO SMOKE.

A correspondent of the Scientific American writes as follows: The problem: if one drop of nicotin kills a rabbit in three minutes and a half, how many cigars must a man smoke to reach a state of locomotorataxy, reminds me of another arithmetical query no less profound, to wit: If eight shillings make one dollar, how much milk does it require to make a pair of stockings for an elephant?

The mere fact that nicotin is a poison for one species of animals is no proof of its similar effects on all others. I could quote an endless line of examples in favour of this assertion. 'hus. phellandrium aquaticum is fatal to horses, but may be eaten with impunity by oxen; doronicum kills dogs, but fattens antelopes, thrushes, and swallows; the cocculus indicus is deleterious to fish and lice, but a salutary ingredient in the

best London porter.

But, even granted that tobacco contains matter poisonous to the human system, let me ask what does not? Potatoes. cereals, and, in fact, nearly all vegetables, contain alcohol or other matter, which, if taken alone or in overdose, may kill a man in two minutes and a quarter. Even the very air we breathe is replete with nitrogen and other deadly gases, which the anti-smoker would do well to avoid. The mere proof, therefore, that the extract of tobacco is a poison should not suffice as a conclusive argument against its use. It is stated that tobacco reduces the vital energy of the system. It may as well be said that nothing draws so much on the vital powers as the hewing of trees or ploughing of fields. Such labour virtually tends to exhaust the system; but does not Nature, when properly sustained by food and rest, amply repay the outlay? Does not just this exhaustive practice tend to build up a stock of iron nerve and muscle? The same with mental labour. Nothing so draws on the brain as the continuous and active production of ideas; still nothing will make more a powerful mind than just such exhaustive production, if sustained by food and rest. Therefore tobacco can safely be considered a benefactor in the same line as muscular or mental activity. It partially reduces the system only to give Nature an opportunity to replenish with opu-This argument is of course only applicable to healthy persons. Invalids should apply to their medical advisers, even such invalids whose disease consists in lack of courage to withdraw their minds from the moulds wherein they were originally cast.

Now let us observe the practical application of the weed: Germans are said to be the greatest smokers; cigars are rawn among the regular rations by their soldiers. And where do you find more powerful men, both mentally and bodily, than in the land of Humboldt and Bismarck? While, on the other hand, the fact that the Chinese and Shakers do not smoke does ot speak much in favour of total abstinence.

Nevertheless, I would advocate the discharge of that inverted distilling apparatus, the pipe, which, unless kept scrupulously clean; that is, used just for one smoke, appears the filthiest thing on record, the chewer's palate always ex-

Your statement, Mr. Editor, that you are always willing to give room to both views of a question, makes me bold in submitting mine to your consideration. I would earnestly warn against a too narrow view of any subject. This is no longer the day for the supremacy of any one abstract science. the exploits of thought should be used in determining our difficult problems. We only heard the doctors thus far. us know what the laymen have to say. At any rate, I must personally protest against your concluding sentence, for should ever see fit to smoke, I will do so deliberately, neither thinking myself a hypocrite, a corrupt man, nor a fool.

A FIREPROOF MAN.

About the year 1869, one Lionetto, a Spaniard, (writes a French chemist,) astonished not only the ignorant, but chemists and other men of science, in France, Germany, Italy and England, by the impunity with which he handled red hot iron and molten lead, drank boiling oil, and performed other feats equally miraculous. When he was at Naples, he attracted the notice of Professor Sementeni, who narrowly watched all his operations, and endeavoured to discover his secret. He observed, in the first place, that, when Lionetto applied a piece of red hot iron to his hair, dense fumes immediately rose from it, and the same occurred when he touched his foot with the iron. He also saw him place a rod of iron, nearly red hot, between his teeth, without burning himself drink the third of a teaspoonful of boiling oil, and, taking up molten lead with his fingers, place it on his tongue without apparent inconvenience. Sementeni's efforts, after performing several experiments upon himself, were finally crowned with success. He found that by friction with sulphuric acid diluted with water, the skin might be made insensible to the action of the heat of red hot iron; a solution of alum, evaporated until it became spongy, appeared to be more effectual in these frictions. After having rubbed the parts which were thus rendered, in some degree, insensible, with hard soap, he. discovered, on the application of hot iron, that their insensi-bility was increased. He then determined on again rubbing the parts with soap, and after this found that the hot iron not only occasioned no pain, but that it actually did not burn the hair. Being thus far satisfied, the Professor applied hard soap to his tongue until it became insensible to the heat of the iron; and having placed an ointment, composed of soap mixed with a solution of alum, upon it, boiling oil did not burn it; while the oil remained on the tongue, a slight hissing was heard, similar to that of hot iron when thrust into water; the oil soon cooled, and might then be swallowed without danger. Several scientific men have since, it is said, successfully repeated the experiments of Professor Sementeni, but we would not recommend any but professionals to try the experiment.

EXCAVATIONS AT EPHESUS .- Some interesting intelligence has reached us (Atheneum) respecting the excavations at Ephesus, carried on under the direction of Mr. J. T. Wood, with the object of illustrating the site of the Temple of Diana. Two years ago, Mr. Wood came on the peribolus wall built by Augustus. This had four inscriptions built into it near an angle, showing that it enclosed the Temple of Diana and the Augusteum. This wall was traced for many hundred feet, and numerous trial holes were sunk in the area defined by it, as being within the sacred precinct. By these means the pavement of the Temple was discovered, together with frusta of columns of white marble, and two capitals, all of colossal dimensions. More recently, the remains of one of the external columns, measuring 6 ft. 1 in. in diameter, have been found in situ. These remains consist of the entire base, and a portion of the lowest drum. The base shows signs of having been coloured red. The works are suspended during the hot season, but will be continued in the ensuing autumn; and Mr. Wood has but little doubt that the result will set at rest the long-mooted questions as to whether the Temple was octastyle or decastyle, &c. We understand that Mr. Wood is preparing for the press an account of his discoveries at Ephesus, which will be published as soon as the excavations are completed.

CHESS.

Solutions to problems sent in by Correspondents will be duly acknowledged.

The following sparkling little game was played about five winters ago at the Chess Divan, London, England; the combatants being Mr. Blackborne, the celebrated blindfold player, and Mr. J. G. Ascher, a manufact of the Mantagal Ches Club. member of the Montreal Chess Club.

Referring to the former gentleman's exploits, the *Hustrated London News* of November 4th mentions that during a tour in the north-west of England, he gave a public exhibition of his powers at Nottingham, playing eighteen games simultaneously, with the assistance of a chessboard; winning fourteen and losing two: and, on another occasion, conducting ten games without sight of a chess-board, losing only two.

PHILIDOR'S DEFENCE.

White,	Black,
Mr. J. G. A.	Mr. B.
1. P. to K. 4th	P. to K. 4th
2. K. Kt. to B. 3rd 3. P. to Q. 4th	P. to Q. 3rd P. to K. B. 4th (a)
4. Q. P. takes K. P.	B. P. takes P.
5. Kt. to K. Kt. 5th	P. to Q. 4th
6. P. to K. 6th 7. Q. Kt. to B. 3rd	K. Kt. to R. 3rd P. to Q. B. 3rd
8. P. to K. B. 3rd (b)	K. B. to K. 2nd
9. K. Kt. to B. 7th	Kt. takes Kt.
10. P. takes Kt. ch 11. P. takes P.	K. takes P. R. to K. sq.
12. K. B. to Q. 3rd	K. B. to Q. B. 4th (c)
13. Q. to R. 5th, ch	K. to Kt. sq.
14. Q. B. to K. Kt. 5th 15. Castles. (Q. R.) (d)	Q. to Q. 2nd R. to K. 4th
16. P. takes P.	P. to K. Kt. 3rd (e)
17. P. takes P.	Q. takes P.
18. K. B. to B. 4th, ch. (f) 19. R. to Q. Sth, ch.	Q. B. to K. 3rd K. B. to B. sq.
20. O. B. to R. 6th	Q. Kt. to Q. 2nd
21. Q. takes R. (g)	Kt. takes Q.
22. R. takes R. 23. K. R. to B. sq.	Q. Kt. to Q. 2nd Q. B. to K. B. 2nd
24. R. takes B.	Resigns.
	and the second s

(a) This is the move recommended by Philidor, the "Chess King" of his day, who maintained that it gave the defence a superior game; now-a-days, however, it is considered very unreliable and hazardous. It was probably tried in the present instance, for the sake of variety, or as an experiment.

(b) Thus far the game is, move for move, identical with the line of play given as best for the attack in Staunton's "Chess Process."

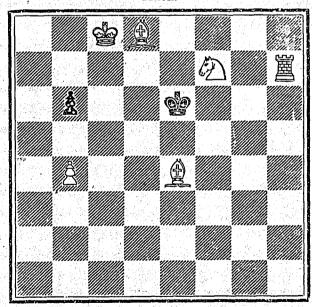
(c) B. to B. 3rd might have been preferable; but Black has already a very difficult position.

(d) White's forces are all in action, in marked contrast with those of its adversary.

(e) The attack now wins by force in a few moves.

(/) If-P. to K. R. 3rd White wins easily by-17. Q. to K. Kt. 6th, as a examination of the subsequent position will prove. (q) The first player's moves throughout this brilliant little game could not have been improved.

> PROBLEM No. 37 By J. W. BLACK.



WHITE. White to play and mate in three moves.

SOLUTION OF ENIGMA No. 16. White. K. to R. 8th. P. takes Q. Kt. to Kt. 4th, dis. oh.
 Q. to K. R. 2nd, ch.
 Kt. mates. VARIATIONS K. to R. 6th. Kt. to K. R. 2nd
 R. or Q. mates. Any move. K. to Kt. 8 Any move. to Kt. 8th or B. 8th. 2. R. to Q. R. 8th 3. R. mates. K. to B. 6th * 2. Q. to Q. B. 2nd 3. Q. to Q. 3rd, mate