

SOLUTIONS.

Solution of Problem No. 291.

- White. Black.
1. R to K B 5 1. Any move.
2. Mates accordingly

Solution of Problem for Young Players No. 289.

- WHITE. BLACK.
1. R at K 2 takes B 1. Any move.
2. Mates accordingly

PROBLEM FOR YOUNG PLAYERS, No. 290.

- White. Black.
K at K 7 K at Q B 3
R at K B 2 B at K 3
B at Q R 5 K at Q B 6
K at Q B 7 Pawns at K B 2 and 6,
Pawns at Q B 4 Q B 4 and Q R 2
and Q R 6

White to play and mate in three moves.

THE CITIZENS' EXHIBITION COMMITTEE is very much gratified at the response to an appeal for sleeping apartments, to provide for those visitors whom the hotels cannot accommodate. There are now registered over thirteen hundred and fifty rooms, but appearances indicate that many more will be required. Citizens who can spare one or two more rooms, will kindly send without delay their address and terms to the Secretary, 151 St. James street.



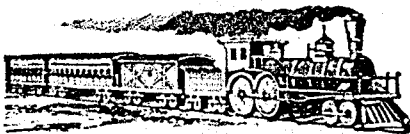
CANADIAN PACIFIC RAILWAY.

Tenders for Rolling Stock.

THE time for receiving tenders for the supply of Rolling Stock for the Canadian Pacific Railway, to be delivered during the next four years, is further extended to 1st October next.

By Order, F. BRAUN, Secretary.

Department of Railways and Canals, Ottawa, 26th July, 1880.



C. M. O. AND O. RAILWAY.

Change of Time.

COMMENCING ON

Wednesday, June 23, 1880.

Trains will run as follows:

	MIXED.	MAIL.	EXPRESS.
Leave Hochelaga for Hull.....	1.00 a.m.	8.30 a.m.	5.15 p.m.
Arrive at Hull.....	10.30 a.m.	12.40 p.m.	9.25 p.m.
Leave Hull for Hochelaga.....	1.00 a.m.	8.20 a.m.	5.05 p.m.
Arrive at Hochelaga.....	10.30 a.m.	12.30 p.m.	9.15 p.m.
		Night Passenger	
Leave Hochelaga for Quebec.....	6.00 p.m.	10.00 p.m.	3.00 p.m.
Arrive at Quebec.....	8.00 p.m.	6.30 a.m.	9.25 p.m.
Leave Quebec for Hochelaga.....	5.30 p.m.	9.30 p.m.	10.10 a.m.
Arrive at Hochelaga.....	5.00 a.m.	6.30 a.m.	4.40 p.m.
Leave Hochelaga for St. Jerome.....	5.30 p.m.		
Arrive at St. Jerome.....	7.15 p.m.	Mixed	
Leave St. Jerome for Hochelaga.....			6.45 a.m.
Arrive at Hochelaga.....			9.00 a.m.

(Local trains between Hull and Aylmer.)
Trains leave Mile-End Station *Seven Minutes Later.*
Magnificent Palace Cars on all Passenger Trains, and Elegant Sleeping Cars on Night Trains.
Trains to and from Ottawa connect with Trains to and from Quebec.
Sunday Trains leave Montreal and Quebec at 4 p.m.
All Trains Run by Montreal Time.
GENERAL OFFICE, 13 Place d'Armes Square.
TICKET OFFICES, 13 Place d'Armes, and 202 St. James Street, Montreal.
Opposite ST. LOUIS HOTEL, Quebec.
L. A. SENECAI, Gen'l Sup't.

CARDS—10 Lily of the Valley, 10 Scroll, 10 Engraved, 10 Transparent, 1 Model Love Letter, 1 Card Case Name on all 15c. WEST & CO., Westville, Conn.

E. N. FRESHMAN & BROS.

Advertising Agents,
186 W. Fourth St., CINCINNATI, O.,
Are authorized to receive advertisements for this paper. Estimates furnished free upon application.
Send two stamps for our Advertisers' Manual.

THIS PAPER MAY BE FOUND ON FILE AT GEO. P. ROWELL & CO'S Newspaper Advertising Bureau (10 SPRUCE STREET), WHERE ADVERTISING CONTRACTS may be made for it in **NEW YORK.**

CANADA'S GREATEST EXHIBITION.

A MAMMOTH FAIR — OF — SURPASSING MAGNITUDE

— AND — GRANDEUR!

IN THE CITY OF

MONTREAL,

SEPTEMBER
14th, 15th, 16th, 17th, 18th,
20th, 21st, 22nd,
23rd & 24th.

A Programme never before excelled on the Continent. A Fortnight of Exciting Spectacles and Delightful Amusements.

Eight Magnificent Exhibition Buildings, making one of the most complete Fair Grounds in America.

The Exhibition proper will embrace a Grand Display of Ingenious Machinery, in motion, showing the Process of Manufacture, together with the various Agricultural, Horticultural, Industrial and Mineral Products of the Dominion, and Contributions from the Outside World.

The Incidental Attractions are on a magnificent scale, and embrace a combination of sights which may not be witnessed again in a lifetime.

A Lacrosse Tournament,

Consisting of a series of exciting matches amongst the crack Clubs of the world, showing the National Game in all its perfection and presenting the finest opportunity to witness Lacrosse ever given in this or any other country.

Torpedo Explosions

In the harbor, showing the modes of torpedo warfare with their thrilling spectacular effects.

A Superb Display of Fireworks

With illuminations of the Mountain by Bengal fires and magnificent aerial pyrotechnic exhibitions, including the discharge of two hundred bomb shells of the largest size, bursting in mid-air and filling the heavens with showers of gorgeous stars.

Balloon Ascensions.

Mammoth Musical Festivals.

Grand Athletic Feats.

Electric Light Exhibitions.

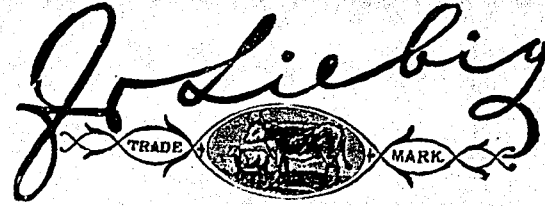
Music by three Military Bands in the Public Gardens every Night.

Exciting and edifying fun for the million.

CHEAP EXCURSIONS TO AND FROM THE CITY.

SEE PROGRAMME.

LIEBIG COMPANY'S EXTRACT OF MEAT



FINEST AND CHEAPEST MEAT-FLAVOURING STOCK FOR SOUPS, MADE DISHES & SAUCES. CAUTION.—Genuine ONLY with fac-simile of Baron Liebig's Signature in Blue Ink across Label.

"Is a success and boon for which Nations should feel grateful."—See *Medical Press, Lancet, Brit. Med. Jour., &c.* "Consumption in England increased tenfold in ten years." To be had of all Storekeepers, Grocers and Chemists. Sole Agents for Canada and the United States (wholesale only) C. David & Co., 43, Mark Lane, London, England.

THE BEST REMEDY FOR INDIGESTION.

TRADE **NORTON'S** MARK.



CAMOMILE PILLS are confidently recommended as a simple Remedy for Indigestion, which is the cause of nearly all the diseases to which we are subject, being a medicine so uniformly grateful and beneficial, that it is with justice called the "Natural Strengtheners of the Human Stomach." "Norton's Pills" act as a powerful tonic and gentle aperient; are mild in their operation, safe under any circumstances, and thousands of persons can now bear testimony to the benefits to be derived from their use, as they have been a never-failing Family Friend for upwards of 45 years. Sold in Bottles at 1s. 1½d., 2s. 9d., and 11s. each, by all Medicine Vendors throughout the World.

CAUTION.

Be sure and ask for "NORTON'S PILLS," and do not be persuaded to purchase an imitation.

THE BURLAND LITHOGRAPHIC COMPANY

(LIMITED)

CAPITAL \$200,000,

GENERAL

Engravers, Lithographers, Printers

AND PUBLISHERS,

3, 5, 7, 9 & 11 ELEURY STREET, MONTREAL.

THIS ESTABLISHMENT has a capital equal to all the other Lithographic firms in the country, and is the largest and most complete Establishment of the kind in the Dominion of Canada, possessing all the latest improvements in machinery and appliances, comprising:—

- 12 POWER PRESSES
- 1 PATENT LABEL GLOSSING MACHINE
- 1 STEAM POWER ELECTRIC MACHINE,
- 4 PHOTOGRAPHING MACHINES,
- 2 PHOTO-ENGRAVING MACHINES,
- Also CUTTING, PERFORATING, NUMBERING, EMBROIDERING, COPPER PLATE PRINTING and all other Machinery required in a first class business.

All kinds of ENGRAVING, LITHOGRAPHING, ELECTROTYPING AND TYPE PRINTING executed IN THE BEST STYLE

AND AT MODERATE PRICES

PHOTO-ENGRAVING and LITHOGRAPHING from pen and ink drawings a SPECIALTY.

The Company are also Proprietors and Publishers of the CANADIAN ILLUSTRATED NEWS, L'OPINION PUBLIQUE, and SCIENTIFIC CANADIAN.

A large staff of Artists, Engravers, and Skilled Workmen in every Department.

Orders by mail attended to with Punctuality; and prices the same as if given personally.

G. B. BURLAND, MANAGER.

THE COOK'S FRIEND

BAKING POWDER

Has become a HOUSEHOLD WORD in the land, and is a HOUSEHOLD NECESSITY

In every family where Economy and Health are studied. It is used for raising all kinds of Bread, Rolls, Pancakes, Griddle Cakes, &c., &c., and a small quantity used in Pie Crust, Puddings, or other Pastry, will save half the usual shortening, and make the food more digestible



SAVES TIME, IT SAVES TEMPER, IT SAVES MONEY.

For sale by storekeepers throughout the Dominion, and wholesale by the manufacturer.

W. D. MCLAREN, UNION MILLS, 17-19-21-23

SEND 10c. to the Queen City Card House, Toronto, Ont., for 25 Pretty Bird and Floral Cards, 25 new Transparent, 25 White Bristol, or 5 neat assorted Cards, with name. 12 Turn down cor2r, gilt beveled edge, very handsome, 20c. Outfit 10c.

50 TORTOISE, Scroll, Wreath, Chromo, Motto and Floral Cards, 10c. U. S. Card Co., Northford, Ct.

Mr. J. H. BATES, Newspaper Advertising Agent, 41 PARK ROW Times Building, NEW YORK, is authorized to contract for advertisements in the CANADIAN ILLUSTRATED NEWS at our BEST RATES.

The Scientific Canadian

MECHANICS' MAGAZINE

AND PATENT OFFICE RECORD

A MONTHLY JOURNAL

Devoted to the advancement and diffusion of Practical Science, and the Education of Mechanics.

THE ONLY SCIENTIFIC AND MECHANICAL PAPER PUBLISHED IN THE DOMINION.

PUBLISHED BY

THE BURLAND LITHOGRAPHIC CO.

OFFICES OF PUBLICATION,

5 and 7 Bleury Street, Montreal.

F. N. BOXER, ARCHITECT & CIVIL ENGINEER, Editor.

TERMS:

One copy, one year, including postage... \$2.00
One copy, six months, including postage... 1.10
Subscriptions to be paid in ADVANCE.

The following are our advertising rates:—For one monthly insertion, 10 cts. per line; for three months, 9 cts. per line; for six months, 8 cts. per line; for one year, 7 cts. per line; one page of illustration, including one column description, \$30; half-page of illustration, including half column description, \$20; quarter-page of illustration, including quarter column description, \$10.
10 per cent. off on cash payments.

INVENTIONS AND MACHINERY, &c., or other matter of an original, useful, and instructive character, and suitable for subject matter in the columns of the MAGAZINE, and not as an advertisement, will be illustrated at very reduced rates.

REMITTING MONEY.—All remittances of money should be in the form of postal orders. When these are not available, send money by registered letters, checks or drafts, payable to our order. We can only undertake to become responsible for money when sent in either of the above ways.

This journal is the only Scientific and Mechanical Monthly published in Canada, and its value as an advertising medium for all matter connected with our Manufacturing, Foundries, and Machine Shops, and particularly to Inventors, is therefore apparent.

British American

BANK NOTE COMPANY.

MONTREAL.

Incorporated by Letters Patent.

Capital \$100,000.

General Engravers & Printers

Bank Notes, Bonds,

Postage, Bill & Law Stamps,

Revenue Stamps,

Bills of Exchange,

DRAFTS, DEPOSIT RECEIPTS,

Promissory Notes, &c., &c.,

Executed in the Best Style of Steel Plate Engraving.

Portraits a Specialty

G. B. BURLAND, Manager.

President, 42, 407.