THE CITY DIRECTORY.

Hotels and Restaurants.

ISLAND HOUSE-Best eigars and liquors Meals at regular hours. W. DOYLE, Market Square. BURNETT HOUSE, Ontario St., nearest first class hotel to G. T. R. and K. & P. Stations. T. Wilson, Proprietor.

ALBION HOTEL, corner Queen and Montreal Streets, well situated, with yard and stabling. NELSON SWITZER, Proprietor

OTTAWA HOTEL, corner o Ontario and Princess Streets. First-class accommodation; yard and stabling. JAMES NORRIS, Proprietor. SCOTT'S HOTEL, cor. Queen and Ontario Sts.

Satisfaction guaranteed. Fine liquors and cigars. Good yard and stabling. A. Simpson. ANGLO-AMERICAN HOTEL, most convenient and popular hotel in city, opposite to G.T.R. station and steamboat landings, Mrs. SHANAHAN and from trains. A. VANALSTINE, Prop.

Livery Establishments. F. A. Bibby, 129 Brock Street, the leading hack and livery stable in the city. Telephone No. 157.

". C. Wilson, 120 Clarence Street, the largest longest established livery in the city. Telephone No. 179. Vehicles ready at a mo-

ment's notice. With St. Lawrence Hotel on King Street. First class rigs will always be on hand on the shortest

McCammon Bros., Kingston Horse Exchange, Livery and Boarding Stables, corner of Brock and Bagot Streets. A new and stylish outfit of vehicles and excellent horses. Charges mode-

H. P. Wells Livery, foot of Princess St., is the most thoroughly equipped one in the city, having every style of rig kept in a first-class livery. Special rates to opera and commercial men. Telephone No. 10.

Watches and Jewellery.

F. W. SPANGENBURG, manufacturer and importer of fine jewellery, 347 King Street.

J. A. LEHEUP, watch maker, jeweller, 68 Brock St., dealer in watches, clocks and diamonds. SMITH BROS., 345 King St., headquarters for Watches, ranging in price from \$3 to \$200; Silverware and Jewellery.

A. M. BROCK, watchmaker, jeweller and engraver, has every facility for manufacturing and repairing jewellery in all its branches.
Golden Diamond Watch Sign, 90 Princess St.

Groceries and Liquors.

J. HALLIGAN & Co., 53 Brock Street. Family groceries, imported wines, liquors and cigars, VICTORIA WAREHOUSE, admitted to be the best place in the city to buy groceries, crockery, china, etc. Thos. II Johns.

TIERNEY BROS. have removed to their new premises, Brock Street, Market Square, where they show the largest and finest stock of Imported and Domestic Liquors, Teas, Cigars, &c., in the city.

Financial.

CARRUTHERS BROS., Financial Agents, King Street. Money to loan on real estate and other

MONEY TO LOAN in large or small sums at low Loans granted on City and County Debentures.
Apply to Thomas Briggs, Manager, Frontenac Loan and Investment Society. OFFICE-Opposite the Post Office.

Fruit, Confectionery, &c. R. H. Toye.—Try the Milk Rolls and Bath Buns manufactured at the King Street Bakery. R. H. TOYE, Market Square.

THE BEEHIVE-Fine groceries, fine and domestic fruits, Jos. HISCOCK, Masonic Buildings, Market Square.

W. C. HORTON, dealer in fresh fish, oysters, fruit, etc., 62 Brock Street,

Cigars and Billiards.

R. NEWLANDS, Princess Street, dealer in cigars, tobaccos, pipes, fishing tackle and pocket books. Finest assortment in the city. HOLDER BROS., (J. B. and F. W.) dealers in choice cigars and tobaccos. Pool and billiard room-inconnection. 239 Bagot St., near Princess Photographic.

YOU CAN GET BARGAINS in Christmas Cards

and Photograph Albums at J. W. Powell's, the Photographer. H. HENDERSON, Photographer. Enlarged

Portraits and Views. Satisfaction guaranteed. Tailoring.

SUITS TRIMMED and made to order, in latest fashions at JOHN SHANAHAN'S, Market Square. FOR LATEST AMERICAN STYLES, guaranteed to fit, go to A. O BRIEN'S, 269 Princess St., above Sydenham.

Areated Waters, Etc.

ACKNOWLEDGED by everybody that the finest line of soft drinks manufactured in the city can be found at HINDS BROS', Market Square. They consist of all areated waters. Prompt attention paid to pic-nic parties. ATTelephone

Crockery, Glassware, Etc. E. Jones, 280 Princess, Street, has always an excellent stock of express waggons, crockery, glassware, baskets and fancy goods to choose from. A Registry office for servants in connec-

Plumbing and Gas Fitting. J. G. Bastow, practical sanitarian. Plumo ing gas and steam fitting, 349 King St. Tele phone, No. 62.

Boots and Shoes. W. ADAMS, mnfr. Men's work a specialty. Factory work on hand. Brock St., near Market.

THE LARDER.

BUTCHERS, FARMERS & GARDENERS.

Prime small hog casings, by tierce, 500 lbs. 28c. per lb; kegs, 100 lbs, \$30; half kegs, 50 lbs., \$15.00; small quantities, 35c per lb.

English sheep casings, kegs, of 50 large bund les, \$30; small quantities, 65c per bundle.

Pure Fertalizer, composed of blood, bone and meat, only \$30 per ton; fine bone meal, \$35 per ton; coarse bone meal, \$35 per ton, f. o. b. Hamilton

-- HAMILTON F. ROWLIN & CO.,

APPLES! APPLES!!

Winter Apples, Baldwins, Northern Spies, Russetts, Greenings, &c., very choice. Now is the time to buy your winter supply.

REES BROS..

Man. Confectioners.

JUST THE THING FOR PIC-NICS. Ginger Ale, Lemon Soda, Birch Beer and Cream Soda—the finest in the city. Davies Gold Medal Ale in pints and quarts.

Also a fine stock of choice Wines and

JAMES THOMPSON, 331 and 333 King St'

June 1. CITY FLOUR STORE.

CHOICE FAMILY & BAKERS' FLOUR SEED GRAIN, PRESSED HAY, CLO-VER AND TIMOTHY SEED.

C. D. FRANKLIN, MARKET SQUARE.

Feb. 4.



CRUELTY OF BOYHOOD.

The Employment of Electric Clocks in Towns Where Earthquakes Are Frequent-An Amusing Application of Photography by Means of a Plate Holder,

It is well known that all light falling upon a perfectly black surface is absorbed, and a photographic plate exposed in a camera pointed toward such a surface will be entirely unacted upon. The most intense black is produced simply by absence of light, and the entrance to a cave or the open door of a perfectly dark room forms a photographic background, suitable for the production of some very amusing pictures.

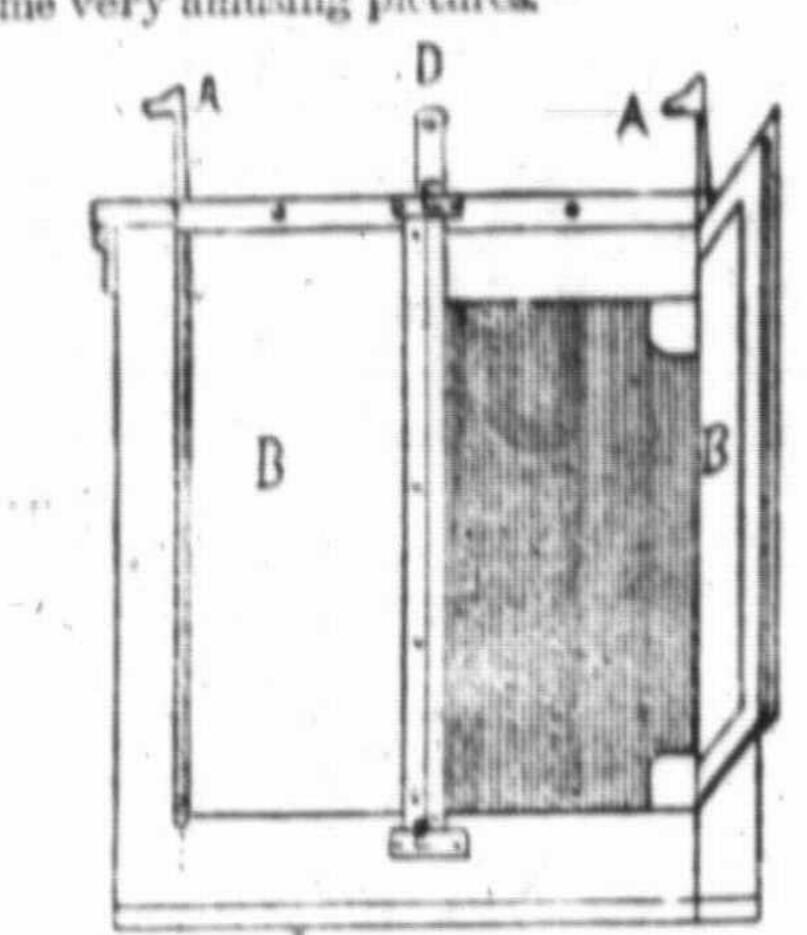


FIG. 1-PHOTOGRAPHIC PLATE HOLDER, If a person stands before such a black background and is photographed, only that part of the plate will be affected which receives the light reflected from himself. If he then changes his position so that his image falls upon another part of the plate, both images will appear in the same picture when developed; and a photograph can thus be made in which a person is apparently shaking hands with himself, playing a game of cards with his double, of offering him refreshments, etc.

As a perfectly dark background is not always available, a French photographer, M. Duc, has invented a form of plate holder by which two opposite sides of the same plate can be exposed at different times. The constration i evident from the engraving (Fig. 1). The doors, B, B, are opened by the pieces of metal, A. A. D is a strip of sheet metal which is on'y used to cover the crack between the two doors, and is drawn out after the holder is placed in the camera. line exactly corresponding to the division in the plate holder is drawn on the focusing glass to insure accuracy in adjusting the different positions of the sitter.



Fig. 2 shows one of the results obtained by M. Duc with this plate holder. La Nature gives the following explanation of how the picture was made: The painter, easel and stool were first photographed on one-half of the plate; then, putting on his coat and hat, the artist transformed himself into a model and was again taken on the other half. The portrait on the easel is still the same person, but was afterwards added to the proof and not directly photographed.

The Savagery of Boyhood.

Mr. John Johnston, in Popular Science Monthly, brings home the forcibleness of the analogy between the traits of savages and that of developing civilized mankind. He cites a case of wanton cruelty recorded, by a boy without any apparent feeling for the cruelty of the act. Mr. Johnston, opposing the sentiment that pervades much of the literature that is supposed to be written for boys, does not predict for this boy a life of sin, but gravely contemplates the trait as a step in the normal development of youth. Pity is a late factor in moral evolution, and a really "good" boy is morally precocious or diseased. This view does not lower one's estimate of a boy's virtues, but accents those that are suited to his years, as well as the importance of the gradual and timely appearance of the several instincts and emotions without which civilization would be impos-

Serviceable Grate Bars. To remove one troublesome complaint that frequently causes grate bars to warp, says American Engineer, have suitable space or

clearance at each end of the bar. Grate bar bearers will prove more serviceable if they are placed a short distance from the end of the grate bar, leaving space so that whatever falls at the end may not lodge there. Some grate bar bearers are placed up to the bridge wall at one end and join the dead plate at the opposite end. As these places are most likely to accumulate ashes they speedily choke up, if openings are not provided for their escape.

Two New Alloys of Aluminum. M. Bourbouze has, says Revue Scientifique, formed an alloy of forty-five parts of tin and fifty-five of aluminum, which answers for soldering aluminum. This alloy possesses almost the same lightness as the pure aluminum and can be easily soldered. M. Bourbouze has invented another alloy containing only 10 per cent of tin. This second alloy, which can replace aluminum in all its applications, can be soldered to tin, while it preserves all the principal qualities of the pure metal.

Electric Clocks.

An export house in Stuttgart, Germany, has recently supplied to the town of Caracas, in Venezuela, a number of clocks for the public streets. On account of frequent earthquakes clock towers are not advisable, and since the clocks must be placed low, a comparatively large number is required. Among the clocks sent out is one with the dial thirteen feet in diameter. All the clocks will be worked electrically and illuminated at night with the electric light.

How to Waterproof Canvas.

For a good solution for waterproofing canvas horse and wagon covers that will be flexible, take boiled oil, fifteen pounds; beeswax, one pound; ground litharge, thirteen pounds. Mix and apply with a brush to the article, previously stretched against a wall or table, washing and drying each article well before applying the composition.

DR. PETERS.

The American Who Has Received the Cross of the Legion of Honor.

Dr. C. H. Peters, of Hamilton college, Utica, N. Y., who has been the victim of more practical jokes, probably, than any other professor in the United States, is also the recipient of many honors, the last of which is the "Cross of the Legion of Honor," conferred by the president of the French republic. The letter accompanying the ornaments is signed by M. Flourens, minister of foreign affairs, and bears date of Aug. 3, but the insignia did not reach Utica till some time in October, as they had to come through the office of the French

legation at Paris. This high honor, conferred by a foreign government, is but one of many recent proofs of the high reputation American astronomers have obtained abroad. Professor James Watson, of the University of Michi-

his time, especially in Egypt, but, to the intense regret of Michigan, he accepted a place in the University of Wisconsin, and died there from cold contracted in his very first observations. Professor Watson was a native of Michigan, but Dr. Peters, despite his name, is by birth a German; they were great rivals in the discovery of asteroids until it became articles he has written, the charts he has prepared and the valuable notes he has contributed to scientific works are almost beyond computation, as he is singularly careless of his elaim to any production. He loves his science for itself alone. He is a good general scholar, a graduate in Greek and Latin and modern languages; but celestial mechanics are his specialty, and he loves astronomy with such devotion that he has never found time to woo and win a woman.

Christian Henry Frederick Peters (his full name) was born in Germany, Sept. 19, 1813, graduated at the University of Berlin, took the higher degree of Ph. D., and was about to locate in Germany when the increasing probability that he would have to serve seven years in the army induced him to come to the United States. He was first employed in the coast survey, but soon demonstrated his capacity so thoroughly that in 1858 he was chosen professor of astronomy in Hamilton college. In 1867 Edwin C. Litchfield, of Brooklyn, endowed the chair and observatory with \$30,000, since which time it has been known as Litchfield observatory, and has been identified with the fame of Dr. Peters. Among the doctor's many noted achievements was the observation of one eclipse of the sun from the station at Des Moines, Ia., from which important deductions were made; and maps of the transit of Venus made in 1874 in New Zealand. The doctor's party on that occasion took 237 photographs of the different phases of the transit, all of which have proved of great value. Dr. Peters only teaches one class, for a part of the term, and has become so identified with his telescope that he is the subject of many practical jokes. He is familiarly known to the students as "Twinkle," and is so near sighted that it is a common thing for the boys to slip out of his recitation room without his knowledge. There was a marked contrast between him and his great contemporary, and in some sense rival, of Michigan. Professor James Watson was the perfection of physical manhood, with perfect sight and digestion that an athlete might envy. Yet the deep chested and brawny Watson died of disease resulting from the exposure of an anstromer's work. Dr. Peters is a very entertaining talker-to those who can understand him; but he has never mastered the English language, and in moments of excitement the German of his childhood comes out in accent and idiom. He is extremely modest, and never alludes to his own name, saying only

Litchfield observatory on" a given date. THE PURITAN.

of a certain fact that "it was discovered at

The Descon Chapin Statue at Springfield,

Springfield, Mass., rejoices in the possession of a new statue which unites many attractions-it represents the Puritan of early days, the founder of the widespread Chapin family of New England and the early days of Springfield. It was made for the late Chester W. Chapin, president of the Beston



and Albany railroad, in honor of his ancestor, Samuel Chapin, deacon of the first church in Springfield; it is designed not only to represent the man, but as an ideal type of the Puritan character, stern, resolute, self reliant and God fearing, the man who laid the foundations of the free commonwealths of New England. The artist, Augustus St. Gaudens, has done his work well. We in the statue the firm step of the Puritan on his way to church, his cloak flung back, in his hand a stout staff and under his arm a great leather bound clasp Bible. The figure is bronze, of heroic size, and the impression is one of power and earnestness. It stands upon a broad granite pedestal. The face is a sort of composite-made up by a study of the family features of the Chapins. The statue is to stand on the Worthington street side of Stearns park, facing Bridge street, with a setting of trees and shrubs to give a fine effect. The position was chosen by the artist, St. Gaudens. The Springfield critics who have been favored with a view of the statue in advance of the unveiling are warm in praise of it and claim that their city will soon possess the masterpiece of the foremost of American sculptors.

Beavers are very abundant on the Appomattox river in Virginia.



ARMSTRONG'S,

141 Princess Street, Kingston.

one of the standing jokes of the semi-scientific press. Dr. Peters, however, has taken first place, having located forty-four asteroids. He has also catalogued 75,000 zodiachal tars and recorded 12,000 solar spots. The

In Central Canada.

We are always to the front. We have made extraordinary preparations for a ROUSING FALL TRADE. stock is now Complete in Assortment, Splendid in Quality, and Overflowing with Generous Bargains in Men's, Boys' and Youths', Women's, Misses' and Children's

Boots and Shoes

FOR FALL AND WINTER WEAR.

WORTH OF \$20.000

Shoes, Rubbers and Overshoes, Felt Frost-Proof Boots, Moccasins, Trunks and Valises.



And American Kid, Buttoned and Laced Boots,

We are showing a Greater Variety and Larger Stock than all the other Shoe Stores in the City put together. A visit to our store will convince you of the fact that we have the Largest Stock to select from, that our Prices are the Lowest, that our Men's and Boys' Heavy Long Boots are the Best you ever saw.

Men's German Felt Frost-Proof Socks and Rubbers. German Felt Frost-Proof Boots, half foxed, \$2; full foxed \$2.25. These are all Genuine Berlin Manufacture and usually sold at \$2.50 and \$3.00.

We have the only Patent Machine in the city for applying Heel Plates to Overshoes and Rub-With those plates they will wear you as long again. All our Overshoes and Rubbers are fitted with them from the Smallest to the Largest.

Ladies' Rubbers From 35c, Girls' 30c.

Ladies' High Buttoned, Wool Lined, Fine Overs, waterproof, in Canadian and American make. Men's Manitobas, Bellows Tongue Overs. In fact you will find everything that you can wear on your feet, at the

LEADING LOW-PRICED SHOE STORE,

F. Armstrong,

141 PRINCESS STREET.