

Notes and Suggestions

Potatoes are the best crop that can be grown on clear land when it is not desirable to fallow it. To protect trees from the girdling of mice, clear away the earth at the base, wrap a piece of two-ply tarred paper around the tree and replace the earth. One twelve-quart pailful of cut hay and four pounds of meat is a full feed for a thousand-pound horse given twice a day, with an equivalent feeding between of oats or corn and long hay. By a judicious system of winter feeding you can materially increase the comfort of your fowls, and get a suitable reward in an increased quantity of eggs and the good health of your stock. A pig does not perspire like a horse, and on this account it should never be driven fast or chased by dogs. It only takes a little hurrying to get a pig very much heated, and often fatal results will follow.

The Professor was Right.

"Yes sir," went on Professor X. to a gentleman to whom he had recently been introduced, "I have given some attention to the study of human nature, and I rarely fail to read a face correctly. Now, there is a lady," he continued, pointing across the room, "the lines of whose countenance are as clear to me as type. The chin shows firmness of disposition, amounting to obstinacy, the sharp, pointed nose a vicious temperament, the large mouth volubility, the eye dryness of soul, the—" "Wonderful, Professor, wonderful." "You know something of the lady then?" said the Professor complacently. "Yes, a little, she's my wife."

To Take Below Stairs.

A much worn broom is very hard on the carpet. If possible keep one utensil sacred to onions alone. The covers of the range should never be allowed to get red hot. If you wish your bread to be white, put very little lard into the flour. When the griddle persistently smokes, fresh lard will act as a remedy. Do not allow ashes to accumulate in the ash pan until they reach the grate. Don't expect the servant to do good scrubbing with a brush worn down to the wood. A granite iron kettle may be made bright inside by boiling a small quantity of borax in it.

ADVICE TO MOTHERS.—Mrs. Winslow's Soothing Syrup should always be used when children are cutting teeth. It relieves the little sufferer at once; it produces natural quiet sleep by relieving the child from pain; and the little cherub awakes as "bright as a button." It is very pleasant to taste. It soothes the child, softens the gums, allays all pain, regulates the bowels, and is the best known remedy for diarrhoea, whether arising from teething or other causes. Twenty-five cents a bottle. Be sure and ask for Mrs. Winslow's Soothing Syrup, and take no other kind.

ADAMSON'S BOTANIC COUGH BALSAM. SAFE. SURE. PROMPT. 25 CENTS. A WONDERFUL REMEDY. Adamson's Botanic Cough Balsam. It is as pleasant as honey. Coughs, Colds, and Asthma, which lead to Consumption, have been speedily cured by the use of ADAMSON'S BALSAM after all other medicines have failed. Sufferers from either recent or chronic coughs or bronchial affections, can resort to this great remedy, confident of obtaining speedy relief. Do not delay, get it at once. FOR SALE BY ALL DRUGGISTS. Bottled at St. Steeles, N. B., by the proprietors, F. W. KIRKMAN & CO., Druggists, 343 1/2 AVE., N. Y.

COAL, COAL. Arriving Daily from Sydney: Cargoes Old Sydney Mine, Victoria Mine, Reserve Mine. From Pitou: ACADIA NUT, ACADIA ROUND, INTERCOLONIAL NUT, ROUND, OLD ALBION SMALL, (for Smith's use) Also—A large quantity of SLACK COAL, suitable for house use. All of which will be sold at the Lowest Market rates. C. LYONS. ACADIA COAL DEPOT, Peake's No. 2 Wharf, July 30, 1887—ex pat 3aw lat kuar

JACK FROST is coming, and if you want the VERY BEST COAL, GO TO McMILLAN'S, where you can get what you want at the Right Price. Our Coal Trade is fast increasing, without Government assistance, which is a guarantee that we give our customers what they want. A cargo of Anthracite landing to-day. Telephone communication. Orders left at Central Office will be sent free of charge. R. McMILLAN, Foot of Prince Street, et. 15, 1887—cod wky 3mos

A CARD. To all who are suffering from the errors and indiscretions of youth, nervous weakness, early decay, loss of manhood, &c., I will send a receipt that will cure you, FREE OF CHARGE. This great remedy was discovered by a missionary in South America. Send a self-addressed envelope to the REV. JOSEPH T. INMAN, Station D, New York City.

TAMARAC. Alderman R. E. Elcock, Kingston, Ont., says: "Tamarac Elixir" is the best medicine on earth for Coughs and Colds. In my own case it produced rapid and gratifying results. I caught a severe cold which it seemed impossible to break up, but continually became more thoroughly seated. Finally a hacking cough set in which troubled me day and night, causing soreness of the Lungs. Hearing your "Tamarac" highly recommended, I procured a bottle. The first dose eased the cough, and one bottle completely cured me. It is a splendid preparation, pleasant to the taste, and should be kept in every house. Sept. 21, 1887—cod & wky

PURE GOLD GOODS ARE THE BEST MADE. AS IS FOR THEM IN CANADA. THE LEADING LINES ARE BAKING POWDER, FLAVORING EXTRACTS, SHOE BLACKING, STOVE POLISH, COFFEE SPICES, BORAX, CURRY POWDER, CEBERY SALT, MUSTARD, POWDERED HERBS &c. ALL GOODS GUARANTEED GENUINE. PURE GOLD MANFG. CO. FRONT ST. EAST TORONTO.

DR. HODDER'S BURDOCK AND SARSAPARILLA COMPOUND. CURES Liver Complaint, Dyspepsia, Biliousness, Sick Headache, Kidney Troubles, Rheumatism, Skin Diseases, and all Impurities of the blood from whatever cause arising. Female Weaknesses and General Debility. Purely Vegetable. Highly Concentrated, Pleasant, Effective, Safe. ASK FOR Dr. Hodder's Compound. Take no other. Sold Everywhere. Price 75 cents per bottle. DR. HODDER'S COUGH AND LUNG CURE. Sold every where. Price, 25 cents and 50 cents per bottle. Proprietors and manufacturers, The Union Medicine Co., Proprietors, TORONTO, CAN. WM. R. WATSON, Wholesale Agent, Charlotte Town, P. E. I. Sept. 27, 1887—cod & wky

MORTGAGE SALE. To be Sold at Public Auction, in front of the Law Courts Building, in Charlottetown, on SATURDAY, the Fourth day of June next, 1887, at the hour of Twelve o'clock, noon, all that tract, piece and parcel of land, being part of Town Lot number Sixteen, in the first hundred of Town Lots in Charlottetown, bounded as follows:—By a line commencing at the northwest corner of the said Town Lot and extending thence forty feet on Great George Street, thence running towards the east, parallel with King Street, fifty-seven feet, thence running parallel with Great George Street until it meets the southern side of said King Street, thence along said King Street to the corner of commencement, together with all buildings and improvements thereon, and appurtenances thereunto belonging. The above sale is made under and by virtue of a Power of Sale, contained in a certain Indenture of Mortgage, dated the eighth day of April, in the year of our Lord one thousand eight hundred and seventy-six, and made between Patrick Raymond Bowers of the one part, and James Colledge Pope of the other part, of which said Mortgage the undersigned are now the Assignees and mortgagees. For further particulars apply at the office of E. H. Haviland, Charlottetown. Dated this Twenty-ninth day of April, A. D., 1887. JOSEPH HENSLEY, T. HEATH HAVILAND, Assignees, &c. May 2, 1887.—law tl sale The above sale is postponed until SATURDAY the Third day of December next, A. D., 1887, the date to take place at the hour and place above mentioned. Dated this 4th day of June, 1887. JOSEPH HENSLEY, T. HEATH HAVILAND, Assignees, &c.

THE FURNESS STEAMSHIP COY., BETWEEN HALIFAX AND LONDON. It is intended that these Steamers shall make the following sailings: London to Halifax: S.S. Damara, about Nov. 28th Halifax to London: S.S. Clunida, about Nov. 20th Good Passenger Accommodation. Freight both ways at very low rates. Through Bills of Lading from all points on P. E. Island, New Brunswick and Nova Scotia, to Continental and other ports. For rates of Freight and other particulars apply to W. W. CLARKE, Agent at Charlottetown, P. E. I. or to PICKFORD & BLACK, Halifax. Oct. 17, 1887.

CHANGE OF TIME. BOSTON STEAMERS. CARRROLL and WORCESTER will leave Charlottetown every THURSDAY AFTERNOON at 4 o'clock, commencing 8th October. Oct. 3, 1887.

AGENTS—SEA AND LAND. The most attractive Book of the decade, by J. W. Buel, author of "Fishes of the Sea," &c. This Book, of 800 pages, contains 300 Engravings and Superb Embellished Colored Plates, giving an illustrated history of Nature's Wonders and Curiosities in Sea and Land, fascinating stories, thrilling adventures and marvelous descriptions—a whole library of natural history, travel and adventure in grand book for the youth. Send for prospectus to W. E. Carlo, St. John, N. B. J. S. ROBERTSON & BROS. Nov. 4—2aw & wky

H. W. VINNICOMBE, Instructor of the Violin, formerly of the Exeter Opera and Philharmonic Orchestras, pupil of John Kendall, R. A., England. Tuition given on the Instrument individually—not in class. Pupils' concertatory method used. Age preferred—twelve to sixteen years. There is an Orchestral Class in connection for those that are sufficiently advanced, free of charge. For particulars apply to H. W. Vinnicombe, Fitzroy Street, near St. James Church. (Orders for piano tuning left at C. P. Fletcher's, will be attended to promptly.) N. B.—I have two fine old Violins for Sale, August 20, 1887.

WHAT AILS YOU? Do you feel dull, languid, low-spirited, lifeless, and indescribably miserable, both physically and mentally; experience a sense of fullness or bloating after eating, or of "giveness," or emptiness of stomach in the morning, tongue coated, bitter or bad taste in mouth, irregular appetite, dizziness, frequent headaches, blurred eyesight, "floating specks" before the eyes, nervous prostration or exhaustion, irritability of temper, hot flushes, alternating with chilly sensations, sharp, biting transient pains here and there, cold feet, drowsiness after meals, wakefulness, disturbed and unrefreshing sleep, constant, indescribable feeling of dread, or of impending calamity? If you have all, or any considerable number of these symptoms, you are suffering from that most common of American maladies—Bilious Dyspepsia, or Torpid Liver, associated with Dyspepsia, or Indigestion. The more complicated your disease has become, the greater the number and diversity of symptoms. No matter what stage it is in, Dr. Pierce's Golden Medical Discovery will subdue it, if taken according to directions for a reasonable length of time. If not cured, complications multiply and Consumption of the Lungs, Skin Diseases, Heart Disease, Rheumatism, Kidney troubles, or other grave maladies are quite liable to set in, and, sooner or later, induce a fatal termination. Dr. Pierce's Golden Medical Discovery acts powerfully upon the liver, and through that great blood-purifying organ, cleanses the system of all blood-poisons and impurities, freshens the system, restores the equal efficiency in acting upon the Kidneys, and other excretory organs, cleansing, strengthening, and healing their diseases. As an appetizing restorative tonic, it promotes digestion and nutrition, thereby building up both flesh and strength. In malarial districts, this wonderful medicine has gained great celebrity in curing Fever and Ague, Chills and Fever, Dumb Ague, and kindred diseases. Dr. Pierce's Golden Medical Discovery CURES ALL HUMORS, from a common Itch, or Eruption, to the worst Scrofulous "Salt-rheum," "Fever-sores," Scaly or Rough Skin, in short, all diseases caused by bad blood are conquered by this powerful, purifying, and invigorating medicine. Great Eating Ulcers rapidly heal under its benign influence. Especially has it manifested its potency in curing Tetter, Eczema, Erysipelas, Boils, Carbuncles, Sore Eyes, Scrofulous Sores and Swellings, Hip-joint Disease, "White Swellings," Goitre, or Thick Neck, and Enlarged Glands. Send ten cents in stamps for a large Treatise, with colored plates, on Skin Diseases, or the same amount for a Treatise on Scrofulous Affections.

"FOR THE BLOOD IS THE LIFE." Thoroughly cleanse it by using Dr. Pierce's Golden Medical Discovery, which restores the strength and vitality of the system, and builds up the system, and restores the equal efficiency in acting upon the Kidneys, and other excretory organs, cleansing, strengthening, and healing their diseases. As an appetizing restorative tonic, it promotes digestion and nutrition, thereby building up both flesh and strength. In malarial districts, this wonderful medicine has gained great celebrity in curing Fever and Ague, Chills and Fever, Dumb Ague, and kindred diseases. Dr. Pierce's Golden Medical Discovery CURES ALL HUMORS, from a common Itch, or Eruption, to the worst Scrofulous "Salt-rheum," "Fever-sores," Scaly or Rough Skin, in short, all diseases caused by bad blood are conquered by this powerful, purifying, and invigorating medicine. Great Eating Ulcers rapidly heal under its benign influence. Especially has it manifested its potency in curing Tetter, Eczema, Erysipelas, Boils, Carbuncles, Sore Eyes, Scrofulous Sores and Swellings, Hip-joint Disease, "White Swellings," Goitre, or Thick Neck, and Enlarged Glands. Send ten cents in stamps for a large Treatise, with colored plates, on Skin Diseases, or the same amount for a Treatise on Scrofulous Affections. "FOR THE BLOOD IS THE LIFE." Thoroughly cleanse it by using Dr. Pierce's Golden Medical Discovery, which restores the strength and vitality of the system, and builds up the system, and restores the equal efficiency in acting upon the Kidneys, and other excretory organs, cleansing, strengthening, and healing their diseases. As an appetizing restorative tonic, it promotes digestion and nutrition, thereby building up both flesh and strength. In malarial districts, this wonderful medicine has gained great celebrity in curing Fever and Ague, Chills and Fever, Dumb Ague, and kindred diseases. Dr. Pierce's Golden Medical Discovery CURES ALL HUMORS, from a common Itch, or Eruption, to the worst Scrofulous "Salt-rheum," "Fever-sores," Scaly or Rough Skin, in short, all diseases caused by bad blood are conquered by this powerful, purifying, and invigorating medicine. Great Eating Ulcers rapidly heal under its benign influence. Especially has it manifested its potency in curing Tetter, Eczema, Erysipelas, Boils, Carbuncles, Sore Eyes, Scrofulous Sores and Swellings, Hip-joint Disease, "White Swellings," Goitre, or Thick Neck, and Enlarged Glands. Send ten cents in stamps for a large Treatise, with colored plates, on Skin Diseases, or the same amount for a Treatise on Scrofulous Affections. Liver, Blood, and Lungs. For Weak Lungs, Spitting of Blood, Shortness of Breath, Chronic Nasal Catarrh, Bronchitis, Asthma, Severe Coughs, and kindred affections, it is an efficient remedy. Sold by Druggists, at \$1.00, or Six Bottles for \$5.00. Send ten cents in stamps for Dr. Pierce's book on Consumption. Address, World's Dispensary Medical Association, 605 Main St., BUFFALO, N. Y.

JOHNSON'S ANODYNE LINIMENT FOR INTERNAL AND EXTERNAL USE. Cures Diphtheria, Croup, Asthma, Bronchitis, Neuralgia, Pneumonia, Rheumatism, Bleeding at the Lungs, Hoarseness, Influenza, Hoacking Cough, Whooping Cough, Catarrh, Cholera, Morbus, Dysentery, Chronic Diarrhoea, Kidney Troubles, and Spinal Diseases. We will send free, postpaid, to all who send their names, an Illustrated Pamphlet. All who buy or order direct from us, and request it, shall receive a certificate that the money shall be refunded if not abundantly satisfied. Retail price, 25 cts.; 6 bottles, \$1.50. Express prepaid to any part of the United States or Canada. I. S. JOHNSON & CO., P. O. Box 9118, Boston, Mass.

COLUMBUS WATCHES SINCE taking the Agency for these Watches, a large number have been sold and have given satisfaction. If you want a good Watch and an accurate timekeeper, we ask you to try one. Also, a good stock of Waltham, Elgin and Swiss Watches. ENGRAVING. Brooches, Earrings, Scarf Pins, &c., manufactured and engraved to order with any name or initials. All Silverware and Jewelry sold from this date will be Engraved FREE. G. H. TAYLOR, NORTH SIDE QUEEN SQUARE. Nov. 3, 1887—2aw & wky

BARCAINS-BARGAINS IN Chairs, Tables, Bedsteads, &c., and in all kinds of Household Furniture, such as Parlor, Dining-room and Bed-room. All kinds of Bedsteads, Beds, Mattresses, Pillows; All kinds of Chairs, Lounges, Sofas, Sideboards, Cheffoniers, Book-cases, Tables, Washstands, Sinks, Cradles, Cots, Cribs, &c. Picture Frames, and Picture Frame Moulding—late Styles and Finest Quality—Cheap. Looking Glasses and Mirrors, very low. All kinds of Window Furniture, such as Choua Green Blinds and Shades, Cornices, Poles, Rings, Holders, Bands, Chains, Hooks, Blind Rollers, &c. Also—The Grand-daddy Chairs, Wire Mattresses, Children's Sleighs, Carts and Wagons—cheap, cheap, at JOHN NEWSON'S, QUEEN SQUARE, OPPOSITE NEW POST OFFICE. Ch'town, March 9, 1887.

PRINCE EDWARD ISLAND RAILWAY. 1887. Summer Arrangement. 1887. ON AND AFTER WEDNESDAY, JUNE 1st, 1887, Trains will run as follows:—

TRAINS FOR THE WEST. STATIONS. Express. Accom. Accom. Charlottetown, A. M. 6:00, 10:15, 3:30; P. M. 6:14, 10:35, 3:49; North Wiltshire, 6:48, 11:23, 4:35; Hunter River, 6:58, 11:38, 4:50; Bradsbane, 7:23, 12:13, 5:26; County Line Junction, 7:30, 12:21, 5:40; Freetown, 7:40, 12:35, 5:55; Kensington, 7:53, 12:57, 6:17; Summerside, 8:30, 2:00; Miscouche, 8:45, 2:21; Wellington, 9:05, 2:47; Port Hill, 9:35, 3:35; Hunter River, 10:30, 4:45; Bloomfield, 10:47, 5:20; Alberton, 11:14, 6:10; Tignish, 11:55, 7:00; County Line Junction, P. M. 5:45; Cape Traverse, P. M. 6:35.

TRAINS FROM THE WEST. STATIONS. Express. Accom. Accom. Tignish, P. M. 1:30, A. M. 6:00; Alberton, 2:00, 7:05; Bloomfield, 2:25, 7:44; O'Leary, 2:42, 8:10; Port Hill, 3:35, 9:25; Wellington, 4:05, 10:18; Miscouche, 4:25, 10:44; Summerside, 4:55, 11:40, A. M. 6:15, P. M. 7:10; Freetown, 5:30, 12:35, 7:10; County Line Junction, 5:40, 12:50, 7:30; Bradsbane, 5:47, 12:58, 7:39; Hunter River, 6:12, 1:33, 8:14; North Wiltshire, 6:22, 1:48, 8:30; Royalty Junction, 6:56, 2:35, 9:17; Charlottetown, 7:10, 2:55, 9:35; Cape Traverse, A. M. 6:25; County Line Junction, P. M. 7:15.

TRAINS FOR THE EAST. STATIONS. Express. Accom. Charlottetown, P. M. 3:15, A. M. 6:30; Royalty Junction, 3:30, 6:50; Bedford, 3:58, 7:28; Mt. Stewart Junction, 4:30, 8:20; Morell, 4:58, 9:04; St. Peter's, 5:20, 9:35; Bear River, 5:55, 10:27; Souris, 6:25, 11:15; Mt. Stewart Junction, P. M. 4:35, A. M. 8:25; Georgetown, P. M. 5:45.

TRAINS FROM THE EAST. STATIONS. Express. Accom. Georgetown, A. M. 7:10, P. M. 7:17; Cardigan, 7:17, 3:03; Mt. Stewart Junction, 8:10, 4:15; Souris, A. M. 6:15, P. M. 1:20; Bear River, 6:45, 2:10; St. Peter's, 7:20, 3:02; Morell, 7:42, 3:35; Mt. Stewart Junction, 8:10, 4:30; Bedford, 8:15, 4:40; Royalty Junction, 8:40, 5:17; Charlottetown, 9:05, 5:55, 9:20, 6:15.

TELEPHONE COMPANY OF PRINCE EDWARD ISLAND. THIS COMPANY is now ready to transmit written and verbal messages, by Telephone, between Charlottetown, Hunter River, County Line, Freetown, Kensington, Summerside and St. Eleanors, at the following Rates:— From Station to Station, when the distance is 5 miles or under, for each five minutes' conversation, or part thereof, 10 Cents; do do do 5 to 10 miles, 20 " do do do over 10 miles, 25 " Written messages, subject to Company's conditions, will be sent from Station to Station at following Rates:— When distance does not exceed 10 miles, for twenty words or under, 15 Cents; When distance is greater than 10 miles, 25 " For each additional word one cent extra. A discount of 20 per cent from the above rates will be made to lessees of instruments. Written messages will be delivered in Charlottetown within city limits; from all other receiving offices within a quarter of a mile from said offices. Special rates will be made for delivering at greater distances. All communications and messages must be prepaid. The Company is prepared to lease Telephone Instruments in Charlottetown and Summerside at established rates, and to treat with persons requiring private or toll lines. For further information apply to the Subscriber at Charlottetown. JAMES COLEMAN, Superintendent. Railway Office, Charlottetown, May 28, 1887—all pro 61

STEAMER "HEATHER BELLE." Fall Arrangement, 1887. ON and after MONDAY, OCTOBER 3rd 1887, the Steamer "Heather Belle," Hugh McKean, Master, will run as follows: Will leave Orwell Brash Wharf for Charlottetown every Tuesday, Wednesday and Thursday mornings at seven o'clock, calling at China Point and Halliday's Wharves. Will leave Charlottetown for Halliday's, China Point and Orwell Brash Wharf same evenings, at two o'clock, remaining at Brash Wharf every Tuesday and Wednesday night, and on Thursday night returning to Charlottetown, arriving at eight o'clock. Friday, will leave Charlottetown for Cranberry Wharf, East River, at 5 o'clock, a. m.; leaving Cranberry Wharf for Charlottetown at half-past seven o'clock, a. m., calling at Hickey's Wharf. Leaving Charlottetown for Hickey's and Cranberry Wharves at 2 o'clock, p. m., returning to Charlottetown same evening. Every alternate Friday steamer will go to Mount Stewart. Saturday, will leave Charlottetown for Crapaud at nine o'clock, a. m., leaving for Crapaud for Charlottetown, about 1 o'clock, p. m. JOHN HUGHES, Agent. Charlottetown, P. E. I., Oct. 1, 1887. —Imo law

Mortgage Sale. TO be Sold by Public Auction, on THURSDAY the third day of November, A. D., 1887, at Twelve o'clock, noon, at the Court House, in Charlottetown, in Queen's County, under a Power of Sale, contained in an Indenture of Mortgage, dated the third day of July, A. D., 1877, and made between Thomas Henry Keating, of the one part, and Henry Skelkington Poole, of the other part. ALL that piece of land, in Charlottetown, in Queen's County, in Prince Edward Island, being part of Town Lot number forty-two (42), in the first hundred of Town Lots, in Charlottetown, commencing on the westward side of Queen Street, at the southeast angle of the property of William R. Watson, thence by a line at right angles to said street westwardly on or about eighty-six feet, or until it meets the division line between Town Lot number forty-one and said Town Lot forty-two in said hundred, thence along said division line southwardly seventy-two feet, or until it meets the northward edge of King Street, thence along King Street eastwardly twenty-two feet, or until it meets the west boundary of the property of the Bank of Prince Edward Island, thence following the course of the same southwardly on a line parallel with Queen Street sixty-four feet, or to the northward boundary of said Bank's property, thence following said northward boundary eastwardly for the distance of sixty-four feet, or until it strikes the westward edge of Queen Street, thence following Queen Street northwardly for the distance of twenty-eight feet, more or less, to the place of commencement. For further particulars apply to Edward J. Hodgson, Solicitor, Charlottetown. Dated this 31st August, 1887. EDWARD J. HODGSON, Assignee of Mortgage. Sept. 1, 1887—cod tl sale

MACKEREL BARRELS 500 for Sale by CARVELL BROS. July 29, 1887.

Electro Silicon. Magic Brilliant. Direct from Nature's Laboratory. THE UNRIVALLED POLISH FOR Gold and Silver Plated Ware, Glass, Tin, Steel, or any Material wherea Brilliant Lustre is required. Only 12 Cents a Box AT BEER & GOFF'S. April 7—cod wky

THIS PAPER may be found on file at Geo. P. Newsaper Advertising Bureau (10 Spruce Street), where advertising contracts may be made for it in NEW YORK. SCIENTIFIC AMERICAN. ESTABLISHED 1846. THE most popular WEEKLY newspaper devoted to science, mechanics, engineering, discoveries, inventions and patents ever published. Every number illustrated with splendid engravings. This publication furnishes a most valuable encyclopedia of information which no person should be without. The popularity of the SCIENTIFIC AMERICAN is such that its circulation nearly equals that of all other papers of its class combined. Price, \$3.20 a year. Discount to Clubs. Sold by all news-vendors. MUNN & CO., Publishers, No. 361 Broadway, N. Y. PATENTS.—Munn & Co. have also had Thirty-Seven Years' practice before the Patent Office, and have prepared more than One Hundred Thousand applications for patents in the United States and foreign countries. Caveats, Trade-Marks, Copyrights, Assignments, and all other papers for securing to inventors their rights in the United States, Canada, England, France, Germany and other foreign countries, prepared at short notice and on a reasonable terms. Information as to obtaining patents cheerfully given without charge. Hand-books of information sent free. Patents obtained through Munn & Co. are noticed in the Scientific American free. The advantage of such notice is well understood by all persons who wish to dispose of their patents. Address MUNN & CO. Office 361 Broadway, New York 1010