

and allow it to boil gently from thirty to forty minutes. Remove it from the stove, and place the sand, &c., in a shallow conical iron vessel, (18 in. by 4½ deep at the centre is a convenient size) adding cold water till the temperature is reduced to about 100 degrees of Fahrenheit's thermometer. Put in about two ounces of mercury, spreading it as evenly as possible over the surface of the sand. It should remain thus about thirty minutes, being frequently agitated by stirring with an iron or steel spatula, and by lifting the pan from its support and giving it a circular motion with the hands. Next wash off the sand into the first pan; remove the mercury from the amalgamating vessel, concentrating the floured portion with a small piece of sodium amalgam. Wash off the sand from the other pan so as to save the sulphurets, adding any globules of mercury or amalgam which may have come over, to that previously separated, and retort off the whole in an iron retort.

Dry and weigh the sulphurets, and make a fire assay of the whole, or a convenient portion, and state the result of each operation separately.

This I consider to be at once the fairest and most exhaustive process which can be adopted; as it gives the whole amount of metal contained in the assay-piece, at the same time that it distinguishes between the free gold, which the mills ought to save, and the sulphuret gold, which cannot be reduced by ordinary mill-process, and thus shows whether the sulphids are worth concentrating and preserving for being subsequently submitted to reduction by fire or chlorine gas.

The fire assay as usually made, I consider rather as a partial analysis than as a practical working assay.

### Insurance.

**BILL.—An Act to incorporate "The Canadian Lake Underwriters' Association."**—1. The Provincial Insurance Company of Canada, the British America Assurance Company, and the Western Assurance Company, and such other Insurance Companies as may associate with them, are hereby constituted a body corporate and politic, by the name of "The Canadian Lake Underwriters' Association," for the purpose of collecting and disseminating information upon subjects of marine or commercial interest, of encouraging and advancing worthy and well qualified commanders and other officers of steamers or sailing vessels in the merchant service, of ascertaining and certifying the qualifications of such persons as shall apply to be recommended as such commanders or officers, and of promoting the security of life and property on the inland waters of Canada, between the Port of Montreal and the head of Lakes Huron and Superior. 2. The said Corporation shall have power to make and adopt a Constitution and By-laws, Rules and Regulations, for the purposes, objects and government thereof, for the admission of new associate companies, for granting masters and other officers of vessels certificates of competency, for the regulation and payment of fees and dues, and from time to time to alter, modify and repeal the same. 3. The said Corporation may purchase and hold any real estate necessary for actual use and occupation, to an extent not exceeding in value five thousand dollars per annum; and may apply its funds and property, from time to time, in bestowing premiums or medals for praiseworthy acts in the merchant service, and in such other ways as may seem conducive to the purposes aforesaid. 4. The business, property and affairs of the said Corporation shall be under the control of a Board of Managers, consisting of the President, the Vice-President and the Secretary or General Manager for the time being, of each of the Insurance Companies associated with it; but any such Company may, at their option, select some other person from among their Directors, to represent them in lieu of their President, Vice-President, Secretary or Manager; and the person so chosen shall continue in office until the first meeting of the Directors of such Company after the annual election; and if his place at the Board become vacant by death, resignation or other-

wise, another Director may be selected by the said Company to fill the same for the remainder of the term. 5. The Honorable John Hillyard Cameron, the Honorable John McMurich, George Percival Ridout, the Honorable William Cayley, Charles Magrath, Lewis Moffatt, James Sydney Crocker, Bernard Haldan, Thomas W. Birchall, shall constitute the first Board of Managers, and shall continue in office until the third Monday in December next after the passing of this Act, when they shall be replaced by a Board constituted in the manner provided by the last preceding section. 6. The Board of Managers may, from time to time, appoint one or more persons as Inspectors, to report to them upon the following matters, that is to say: 1. Upon the nature and causes of any accident or damage which any vessel has sustained or caused, or is alleged to have sustained or caused, or to any goods, merchandise, or other things whatsoever, aboard such vessel. 2. Whether the provisions of the Act respecting the Navigation of Canadian waters, or any regulations made under or by virtue thereof, have been complied with. 3. Whether the hull, rigging, equipments and appurtenances of vessels are sufficient and in good condition. 7. Every such Inspector, while the navigation is closed, shall have power to go on board any vessel and inspect the same or any part thereof, or any of the boats, equipments or articles on board thereof. 8. And whereas the said Canadian Lake Underwriters' Association have further prayed that they may be authorized, at their own expense, to cause investigation to be made by competent authority into the cause of and the circumstances attending the total or partial loss on the lakes or inland waters of the Provinces of Ontario and Quebec, above Montreal, of any vessel or cargo, in which any of the Companies forming the said Association may be interested, as having issued any policy of Inland Marine Insurance thereon,—and it is expedient to grant their prayer: therefore, the eighty-eighth chapter of the Consolidated Statutes of Canada, intituled, "An Act respecting the investigation of accidents by fire," as extended and amended by the Acts twenty-third Victoria, chapter twenty-five, and twenty-fourth Victoria, chapter thirty-three, except the third and eight sections of the Act first cited, shall extend and apply to all cases of the total or partial loss of any vessel or cargo, on any of the inland lakes or waters of the Provinces of Ontario and Quebec, above Montreal; and the Coroner within whose jurisdiction any such loss shall have occurred, or within whose jurisdiction the vessel shall afterwards be, shall institute an enquiry into the cause, origin and circumstances of such loss, and as to whether it was caused by design, or was the result of want of skill, negligence or accident; and shall act according to the result of such inquiry; and such Coroner and any Jury or Juror by him impaneled in the case, and any witness by him summoned to attend at such inquiry, shall, with regard to such case, have the same powers and duties and liabilities, as such Coroner, jury, juror or witness would have in any case mentioned in the said Act; provided that no Coroner shall institute any such inquiry except upon the requisition, in writing, of the President for the time being of the said Canadian Lake Underwriters' Association, which corporation shall pay all the expenses and costs attending such inquiry.

**FIRE RECORD.**—Yarmouth, Nova Scotia, April 27.—John Baxter's building, Main St., the American House, and Brown and Clindinning's houses; value of property estimated at \$25,000; loss \$30,000; total insurance less than \$12,000; Brown's loss \$13,000; insurance \$3,200; O'Brien, proprietor of the hotel, saved a portion of the furniture; insured for \$2,000; Baxter's building insured for \$1,200, and stock for \$800; Clindinning insured for \$800; fire the work of an incendiary.

Sandwich, Ont., May 1.—Store of Mr. Mason, and contents; covered by insurance; building owned by T. McKee; worth \$1000; insured for \$400; also a number of other buildings said to be not insured.

London, May 1.—Brick building on Market Street, occupied by Laing and G. S. Birrell; Laing's loss, \$1000; insured in the Liverpool,

London and Globe for \$1000; Birrell insured in North British and Mercantile for \$1,800, which nearly covers his loss. The buildings were owned by J. Dalton; insured in Ontario Mutual, for \$1,000; loss, \$1,500. The fire originated in a woodshed in rear of the premises believed to be kindled by an incendiary.

Gerhartown, Ont., April 26.—House of B. Smith; not insured.

Kingston, April 29.—House of T. Sheridan, Division Street; not insured.

Montreal, April.—Stables of Benallick; insured in the Lancashire for \$200.

Guelph, April 25.—Residence of James May, Elora Road loss estimated at \$3,500; insured for \$1,500, in the Provincial; caused by the explosion of a 12 gallon can of coal oil.

Eramosa, Ont., April 16.—Barn of George Duffield and a number of horses and cattle; cause unknown.

Baltimore, near Cobourg, April 5.—House of J. Gillespie and valuable contents; no insurance.

Quebec, April 30.—Berrigan's Hotel, damaged and partly insured.

Calais, Nova Scotia, April.—House of Rev. Phillbrook; furniture partly saved and insured for \$700; library mostly destroyed; insured for \$800. The house belonged to another party and was insured for \$800.

St. John, April 27.—House occupied by Jno. Keogh, entirely destroyed; insurance, \$600.

**MARINE RECORD.**—Buffalo, April.—The boiler of the propeller "Cushman" exploded, killing a number of people; cargo 21,600 bush. wheat for Port Colborne; insured for \$40,000; vessel insured for \$30,000.

**FIRE MARSHALSHIP.**—The Montreal *Evening Telegraph* announces, we have no doubt upon the best information, that Mr. Carter, M. P. P., has been authorized to offer the office of Fire Marshal to Mr. Alfred Perry, and that he has declined it. We believe that the offer was coupled with the condition that if Mr. Perry accepted the office he must not have any connection with any Insurance Company. The office will be a joint one, and we believe Mr. Dennoyez will be one of the incumbents.

### Financial.

**BANK OF BRITISH NORTH AMERICA.**—The subjoined circular has been issued to the shareholders of this bank.—"In accordance with the intimation given by the chairman at the meeting of proprietors held on the 3rd December last, that the accounts of the bank would be published in future at as early a date as possible, the directors now beg to submit the accompanying balance sheet and statement of profit and loss account as on the 31st December last. It will be seen that the net profit for the year 1887 amounts to the sum of £77,583 1s. 5d., which will allow of the payment of a dividend at the customary period, at the rate of 6 per cent. per annum, and a bonus of 1½ per cent., being the same distribution as last year, leaving the sum of £2,583 1s. 5d. to be carried to the rest or balance of undivided profit."

**BANK RESERVES IN THE UNITED STATES.**—The United States National Banks located at the following seventeen redemption cities are required to hold a reserve of 25 per cent., those located at other points being required to hold only 15 per cent.—New York, Boston, Philadelphia, Chicago, St. Louis, Louisville, Detroit, Milwaukee, New Orleans, Cleveland, Cincinnati, Pittsburgh, Baltimore, Leavenworth, San Francisco, Albany, and Washington. These reserves must consist of plain legal tender, or non-interest bearing greenbacks, or specie.

**PRICES OF STOCKS.**—At a recent sale of stocks in St. John, 12 shares Commercial Bank sold at 36½; 11 do. at 36; 50 shares Bank of New Brunswick without dividend, at 35 percent. premium; and 11 shares St. Stephen Bank at 93.

**LONDON ASSURANCE COMPANY.**—This office has declared a dividend of 45 shillings per share on the past half year's business.

**C. P. & M. RAILWAY.**—This Road is again open for traffic, and has the prospect of doing a large business.