beds have been found impregnated with oil. He thought a low temperature insufficient to effect the transformation of animal organisms into oil. He carefully described the chemical process of the of the conversion of vegetable and animal depositions into liquid oil, showing very thorough investigation and ably sustaining his theory for the genesis of oil, in the lower Silurian carbonaceous limestones. The question of temperature was more carfully considered and it was claimed that the chemical transformations producing oil could

take place within certain limits of temperature. Professor Newberry acknowledged that this was a chemical question, but that not all chemists agreed upon certain transformations in carbonaceous substances. Carburetted hydrogen was a product of spontaneous decomposition, and he still thought that the theory presented in the paper was incorrect. He hoped chemists would make observations on spontaneous distillation of carbonaceous substances so as to arrive at a correct

theory, Professor Winchell, remarked that he had spent considerable time in the Ontario region and had carfully examined the petroleum wells. He desired to present a paper referring to the Ontario region. He remarked at some length on the generegion. He remarked at some length on the gene-sis of petroleum, regarding the shales as the true origin. He had examined a test well, and was assured that the corniferous limestones did not furnish the oil. There are dark shales at the bot-tom of the Hamilton group, but it is calcareous in most regions, although in others it is bitumious, and may furnish oil.

Professor Hunt had spent more time in the region than Professor Winchell, and had made wider observations. At Tillotson the oil is undoubtedly from the limestone, because there are no shales above it. Also at Thamesville oil was pumped from sixteen feet below the upper surface of limestone. He remarked further upon some very deep oils, and reservoirs of oil in rocks which do not produce it.

Professor Winchell rose to speak, but Professor Newberry rose to explain that in Pennsylvania the corniferous limestone was not thick enough to furnish oil.

Professor Winchell then said that he would not have Professor Hunt consider the difference question of veracity, for he could not question the authenticity and veracity of the statements made. He proceeded to explain and defend his theory.

## Insurance.

INSURANCE MATTERS IN MONTREAL

## (From a Correspondent.)

## MONTREAL, Sept. 8, 1868.

I question if there is any occupation that affords a larger field for the practice of deception than that of the agency of a Fire Insurance Company, and more especially in the city of Montreal. Fire business in it has reached that pitch, that the *insurers now* name the rate of premium they will pay, and do business on their own terms ; and I regret to say that some of the leading British Companies afford the most ample proof of this fact. Once they get a customer inside their doors he is not allowed to leave till the risk is secured at any rate, A rather curious illustration of this fact has come to my knowledge, and I will briefly state the case. Some twelve months since a policy was taken out by the Grand Trunk Railroad Company with the "Royal" for \$400,000 at 6 per cent making the premium \$24,000. During the period the policy was in force, overtures were made by the Grand Trunk Railway to some six leading insurance companies for a general policy to cover every imaginable property, whether their own or in trust, the amount required was \$4,000, own or in trust, the amount required was \$3,000, 000, (including the \$400,000 then covered by the Royal), several meetings of those six companies were held, involving the loss of a great deal of

time and trouble, and the rate was named by the following Companies, viz., Royal, Phœnix, Impe-rial, North British and Mercantile, Queen, and Liverpool, London and Globe, and communicated to the Grand Trunk Railroad Company. That Company was in no hurry in returning an answer, but kept the Insurance Companies in suspense as to what their final decision would be. Time wore on and some of the agents began to have misgiv-ings as to the good faith of others of their number. All professed to be bound to accept the risk only at the rate named, or do without it, and ample time was allowed them to advise with their principals in England on the matter. So far all went on smoothly, and knowing that the Royal had already received \$24,000 premium on their \$400,-000, they all felt secure in acting in good faith. It appears, however, that they were soon doomed to disappointment for, as usual, one company broke faith in the most treacherous manner. Acting through its New York agent it made over-tures and secured the whole \$4,000,000 policy, leaving the other five offices out in the cold. The Company, acting in this manner, is the Liverpool, London and Globe, and what adds still more to the bad look of the transaction, is the fact that the sum named as the premiums of that amount, is less than the amount paid the Royal for its \$400,000 policy. It remains to be seen whether the head office of this Company will tolerate such a transaction after they are fully in possession of the facts. On this point I may inform you in a future communication. Meantime, however, the Company in question is not likely to make anything by the transaction. Many fires during the past six weeks along the line of the Grand Trunk Railroad have destroyed several bridges, culverts and quantities of cordwood, together with several cars loaded with freight.

To-day I noticed the prompt settlement made for passengers' baggage lost between Brockvile and Kingston, the owners were highly gratified at the liberal and prompt payment which amounted in the aggregate to \$1,600.

I think I am under the mark when I state that the claims for loss since the policy commenced (some eight weeks ago) already exceed \$9,000. Should a fire occur at or near the General Offices, the wooden steam mills, or car shops at Point St. Charles, it might destroy over \$2,000,000 ere it could be got under, these properties being situ-ated at the city limits, where there is only a small 3 or 4 inch waterpipe leading to it. Once let a fire begin at either of the above places designated and it will have made such headway before the city firemen can get at it, that some dozen of buildings would be certainly destroyed. In some of these buildings there are at times 30 to 35 locomotives. I think it only requires to be brought to the notice of the stockholders of the Liverpool, London and Globe Company to prevent a repetition of this style of doing business. Your remarks on the annual statement of the Provincial Insuron the annual statement of the Frovincial Insur-ance Company have been well received here. It is felt to be all-important that the press should closely watch the proceedings of all public com-panies and fearlessly expose anything that is wrong in their management. I shall be curious to see if the Provincial will submit their affairs to a thorough investigation. I fear not.

FIRE RECORD. -- Toronto, Sept. 1.-- A fire broke out on the premises of Thompson & Duff, King street, little damage done. The building and stock were insured in the Liverpool and London and Globe, British America and Provincial.

West Farnham, 2nd Sept. — A barn belonging to the Episcopal parsonage was burnt. Loss \$500; partly insured.

Bowmanville, Aug. 23. + Cheese factory of John oness, four miles west of this place, was totally destroyed. Loss estimated at \$2,000 ; insurance \$1,400 ; cause believed to be incendiarism.

township, no insurance. Originated from a

pipe. Point Grosse, Sept. 2.—One of the steamboats belonging to the Ottawa Transportation Company, was burnt at Point Grosseon the 23rd.

St. John, N.B.-Two houses of John Jone st. John, N.B. -- Iwo houses of John Jones, and one of James Addison, on the Lake Lomond road, were consumed. The latter only insured. A young man named Maxwell Kennedy, said to be intoxicated, was caught by the fire and burned to death.

Prince Albert, Ont.—The barn, with all the season's crop, of J. Ackney, on the 8th concession, Reach township, were consumed. Loss, exclusive of building, estimated at \$1,600 ; insurance \$600 ; building owned by Moore of Brooklin, unine

Kingston, Aug. 30.—Six houses occupied by soldiers of the Royal Canadian Rifles and two others seriously damaged. Loss to the Imperial Government \$6,000.

STEAMERS BURNED AND DAMAGED BY FIRE Since the era of steamboat navigation on the lake it is not a little surprising from the number destroyed, the disasters have been often attended by great loss of life. The most eventful of these oc-curences was that of the steamer Erie, a beautiful craft, with a brief but unfortunate career. Erie was builtat Erie, Pennsylvania, in 1838, and commenced plying between Buffalo and Detroit during the latter part of that season. A more beautiful moddelled or finished boat has never been introduced on our inland seas or lakes, and she was of good speed. She was 600 tons burden, with no cabins above the main deck. In August, 1840, and burst her boiler, causing the death of six persons, in Detroit River, and in 1841, on the night of August 9th, she became a total loss by fire, of August with, she became a total ross by areas Silver Creek, with 280 lives. Those that were rescued were taken on board the steamer Dewitt Clinton, Captain A. H. Squier, with many of the dead, and landed at Buffale the following day. dead, and landed at bunnet the to last by Cap tain T. J. Titus, who was subsequently drowne on the coast of Lake Michigan. The next fearful loss of life by the burning of a steamer, was the boat G. P. Griffith, in Lake Erie, below Cleve land, Captain C. C. Roby, of Perrysburg, in com mand. A few days prior to this sad event the Griffith changed hands at Buffalo, and left that port on a Sunday morning, having on board a large party of excursionists, of which number upwards of 250 were either burned or drowned, including Captain Roby, his wife and child. The steamer Washington No. 2 was burned off Silver Creek on the 2nd of June 1838, with the loss of 60 lives. She was commanded by Captain J. W. Brown. The propellor Pheenix, Captain B. G. Sweet, bound for Chicago, on Lake Michigan, took fire on a cold night in November, 1846, a short distance below Sheboygan, and was totally destroyed, with 190 lives Council Sweet below lives. Captain Sweet happened to be away from his post at the time. The steamer Niagara, Captain F. S. Miller, some years subsequently m with a like fate, with the loss of upwards of eigh lives. Of other steamers which traversed the lakes in those times, mention might be made, which suffered damages or were totally lost by some means, not omitting the Sea Bird, on Lake Michigan, the early part of the present season, with 100 lives. The Great Western was partially destroyed by fire at Windsor; the Thames, a total loss at Windsor; the Little Western, at Detroit; the Cynthia, near Malden; the Daniel Webster and Sandneky, ht Buffelo alogical webster and Sandusky, at Buffalo; also the W. F. P. Taylor. The Detroit No. 2 was partially destroyed by fire at Newport. The steamer Vermillion was tota destroyed in the same manner while laying at the dock in Huron, with five lives. The above is a summary of no less than fifteen boats thus destroyed, with nearly 1,000 lives in all. — Detroit Post.

A LAWSTIT. -- A writ has been issued in the Superior Court, Montreal, in the suit of the Etna Life Insurance Company vs. the Daily News of that city, and served, and is returnable on the 8th