# PROGRESS SATURDAY, AUGUST 14, 1897

#### THE GENESIS OF THE DIAMOND.

#### A Review of the Posthumous Publication Prol. Lewis's Lectures.

There has been published recently a volume of small size, but of especial interest and importance, in regard to the origin of diamonds.

This is none other than the posthumous issue of the full papers of the late Prof. H. Carvill Lewis, edited by his friend, Prof. T. G. Bonney of London. It will be remembered that Prof. Lewis was the first to present a clear and definit theory of the origin of the South African diamonds as resulting from the intrusion of igneous rocks into and through carbonaceoue shales and the crystallization of the carbon throughout the rock as it cooled, from hydrocarbons distilled from the shale that had been broken through. These views. now for the most part accepted, and subsequently confirmed by other and very interesting parallel discoveries he presented in two papers read before the British association for the advancement of Science at its meetings held in 1886, at Birmingham, and in 1887, at Manchester. Before be was able, however, to prepare them for publication and carry them to the greater completeness that he desired, Prof. Lewis succumbed to an attack of typhoid fever, which he removed one of the most brilliant and cap. able of the rising scientists of this country. Agreeably to his expressed wishes, his material was intrusted to his friend and co-laborer, Prof. George H. Williams of John Hopkins University; but by a strange fatality before the latter had time to arrange and edit these papers, he, too, fell a victim to the same disease, in 1894. The work was then committed to Prof. Bonney and at last is given to the scientific world. The book consists of an introductory

note by Mrs. Lewis; a preface by Prof. Bonney; the two papers of Prof. Lawis himself, with some later notes and references by the editor; a brief account of similar material from other localities, belonging to Prof. Lewis also by the editor : a closing note on some MSS. of Prof. Lewis, and a full index. There are also two plates and a number of smaller illustrations, the latter from Prot. Lawis's own drawings.

miscalled 'Cape rubies.' Or smaller diseminated minerals are to be noted perovskite, quite frequent, and magnetite, chromite, ilmenite, and picotite, less so, though common. Rare and minute occurrences are apatite, epidote, orthite, tremolite, tourmaline, rutile, sphene and leucoxene. As decomposition products there are serpentine and calcite abundant, and zolites, chalcedony, and tale; also cyanite. These, with

the diamouds and the included fragments of carbonaceous shhle, make up the contents of this remarkable rock.

#### A HAPPY GIRL.

Miss Amina 'Kelly Tells of Hor Illness and Subsequent Cure-A Statement That Should be Read by Every Girl in Canada.

Miss Amina Kelly, a well known and much esteemed young lady living at Maplewood, N. B., writes :- "I consider it my duty to let you know what your wonderful medicine has done for me. In April, 1896 I began to lose flesh and color; my appetite failed and on going up stairs I would be so tired I would have to rest. I continued in this condition for three months when I was taken suddenly ill and not able to go about. Our family doctor was called in and he pronouuced my illness chlorosis (poverty of the blood.) At first his treatment appeared to do me good, but only for a time, and I then began to grow worse. I continued taking his medicine for three months, when I was so discouraged at not regaining my health that I decline I taking it any longer. I then tried a liquid medicine advertised to cure cases like mine, but did not obtain the slightest benefit. I had become terribly emacia ed and weak. There was a constant terrible roaring noise in my head; my feet and ankles were swollen and I was as pale as a corpse. One day while in this condition my father brought home a box of Dr. Williams' Pink Pills and asked me to try them. In less than a week I could sit up, and in a couple of weeks I could walk quite a distance without being tired. My appetite returned, the roaring in my head ceased, I began to gain flesh and color, and before I had used a balf dozen boxes I was as healthy as I had ever been in my life. My friends did not expect me to recover and are now rejoicing at the wonderful change Dr. Williams' Pink Pills have wrought in me. If my statement will be the means of helping some other discouraged sufferer you are at

times of gem quality and great beauty, and Yarmouth, July 29, to the wife of Willard Moore,a daughter. Round Hill, July 21, to the wife of John Ram say, a daughter. Centreville, Aug. 1, to the wife of John Brooks, a

daughter. Middleton, July 30,] to the wife 'of Wm. Taylor, s

daughter.

Joggin, Digby, July 31, to the wife of Wm. DeLong a daughter.

Northampton, Aug. 4, to the wife of C. W. Conneil, a daughter.

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Clarence, Aug. 1, to the wife of Herbert Williams a daughter

North Sydney, Aug 2, to the wife ef Dr. R C, Mc-Leod, a son.

Winslow, P. E. I. July 26, to the wife of A, D. Mc-Leod. a son. Rosevale, A. Co. July 24, to the wife of Benjamin

Bray, a son Dawsen Settlement, July 18, to the wife of Michael

Steeves, a son. Kingston, N. B. Jaly 31, to the wife of Albert Robi-

chaud, a son. Tusket Wedge, Aug. 1, to the wife of Zacharie

Pothier, a son Tusket Wedge, Aug. 1, to the wife of Michael

Doucette, a son. New Glasgow, Aug 2, to the wife of Rev. G. P.

Raymond, a son.

Granville Ferry, July 22, to the wife of John Wag. stafi, a daughter.

Newport, N. S. July 27, to the wife of Rev. A. Daniel, a daughter.

South Farmington, July 29, to the wife of Albert Dodge, a daughter.

Tidnish Bridge, July 19, to the wife of Charies Parsons, a daughter.

Northampton, N. B. Aug 4, to the wife of C. W. Connell, a daughter.

Darling Lake, Aug. 3, to the wife of Ervine Churchill, a daughter.

Sydney, C, B., July 30, to the wife of John L. McDougall, a daughter.

MARRIED.

Spencer's Island, July 21 Charles E. Heustis to Gertrude Spicer.

Roxbury, Mass, July 24, Arthur Horsfall, M. D. to Estel e L. Chisham.

Moncton, Aug. by Rev. J. M. Robinson, Daniel J.

Murray to Appleton.

Sackville, N. B. fly Rav. C. C. Burgear, Wilson Cole to Cate M. Ayer.

Amhesst, Aug. 7, by Rev. D. A. Steele, Douglas McCabe to Laura Stack.

Amherst, Aug. 2. by D. A. Steele, James S. Cor-andall to E ina flastings. from W. A. CHASE,

Oak Bay, July 28, by Rev. J. W. Millidge, Sargent J. Roix to Emma Roix.

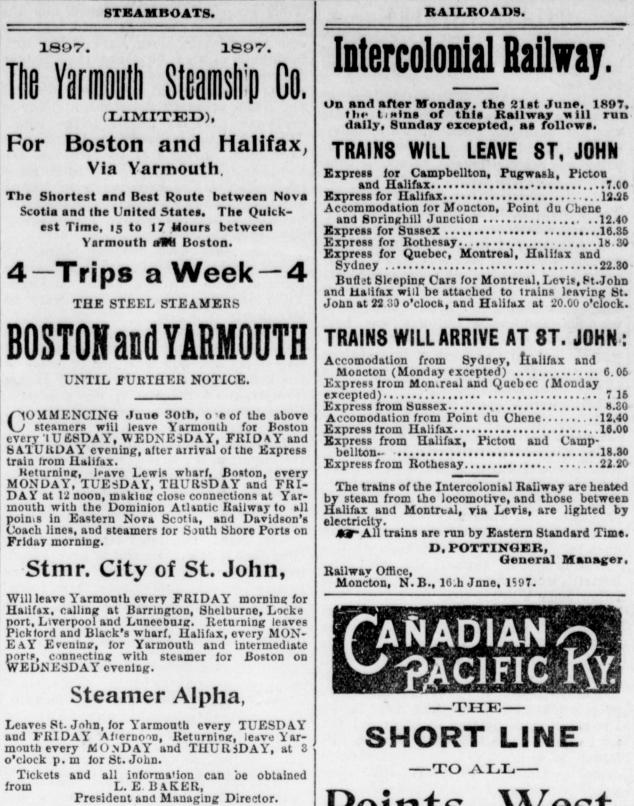
Harcourt, July 28, by Rev. J. McClure, H. A. Ward to Mina McPherson.

Pictou, Aug. 3, by Rev. G. S. Carson, G. W. Mc-Donaid to Annie Ferguson.

International S. S. Co. Kemptville, Aug. 3, by Rev. J. W. Smith, Allen M Gates to Winnitred Hamilton. Richibucto, Aug. 2, by Rev. Fr. Hudon, John

Mevell to Marcella Arsineau.

Yarmouth, Aug. 3. by Rev. E. D. Miller, Capt. John Ross to Mary E. Taylor.



Points West.

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16

The first paper, 'On a Diamond-Bearing Peridotite and on the History of the Dia mond' (1886), is brief, dealing with the character and occurrence of the diamantiferous rock at kimberly and outlining Prof. Lewis's theory.

The second paper, 'The Matrix of the Diamond' (1887), is more extended and goes into an exhaustive dicussion and comparison of the various aspects, contents. and alterations of the rock, which he finds to be different from any previously described, and therefore proposes for it the name of Kimberlite. Its main character is that of a highly basic prophyritic peridotite, filled with olivine crystals and grains, more or less altered, and various other minerals-serpevtine, tremolite, &2., with bronxite, rutile, perovskite, pyrope garnets, micaceous minerals, and other torms, and at times brecciated in structure, filled with fragments of carbonaceous shale brought up from below. The shales are of Triassic age, the "Karoo beds" of that region, and the intrusion of the peridotite in the great "pipes" or chimneys that constitute the mines is therefore proved to be of a later, though not exactly determined period.

The question has been raised sometimes whether the diamonds themselves may not have been carried up from a deeper source in rock below instead of originating in the peridotite, and the occurrence of broken crystals has been cited in support of this view. Prof. Lewis, however, disposes very completely of this idea in two ways; he refers to the well-known fact that each of the great mines or 'pipes' fields diamonds that have, in some respects a type or character peculiar to that one, and different from the others; so that African experts and even those who have never been there can recognize from which mine any diamond has come. Further, as to the broken crystals, he shows that breakage not infrequently occurs after the diamonds are removed from the rock, and points out that this is a result of strain in their formation, as indicated by microscopical and optical examination and that such a condition is known to produce ruptures Clementsville, July 31, to the wife of James Banks, and explosions in other minerals. It may be added here, although Prof. Lewis does not speak of it, that many crystals must be broken in the blasting of the rock, the shovelling and carting of the loosened material, and the various mechanical processes employed at the mines, and that pieces of

perfect liberty to publish it. The above statement was sworn before

me at Maplewood, York Co., N. B., this 14th day of May, 1897. TIMOTHY W. SMITH, J. 1'.

To ensure getting the genuine ask always for Dr. Williams' Pink Pills for Pale People, and refuse all substitutes and nostrums alleged to be just as good.

### The Largest Fountain.

The greatest tountain in the world was turned on recently at Indianapolis, says the St. Lonis Globe Democrat, and permitted to now for an hour. It is one of the cas-

cades now in the course of construction at the base of the soldiers' monument. The flow of water measures fully up to the contract, which calls for 7000 gallons a minute at each of the two cascades as a regular thing, with a capacity under high pressure, Lowever, that is much greater. The combined capacity of the world famous fountains at Versailles, hitherto the largest in the world, is 80,000 gallons an hour. They would make but feeble streams in comparison with the monument cascades, and yet the cost of running the French fountains is so great that the water is only turn-, ed on on gala days.

#### 'Her as Has, Gets.'

Von Moltke was an early riser and loved early risers. Once, while roaming around his Silesian estate at daybreak, he found a peasant woman bearing on her back a sack of potatoes which she had just dug, making a load heavy enough for a mule. 'Here's a thaler for you,' said the great field marshal; 'you see the early bird catches the worm.' Atterward he found out that she was a night thief who had ravaged his fields persistently, but whom his steward had never got up early enough to catch.-London Spectator.

Digby, July 15, to the wife of R. Dakin, a son. Digby, Aug 5, to the wife of George Baxter, a son. Digby, July 22, to the wife of William Bacon, a son. Arygle July 30, to the wife of George Frost a son. Springhill, Aug. 10, Minnie, wife of Robert Digby, July 21. to the wife of Thomas O'Neil, a Moncton, Aug. 6. 30 the wife of C. R. MaeLaren, a son. Truro, Aug. 1, to the wife of Newton Hopper, a Moncton, Aug. 6, to the wife of C. R. MacLaren a Wallace, N. S. July 19, to the wife of Dr. Flinn, a son Sydney, Ju'y 27, to the wife of Neil McMullen, a Woodstock, July 4, to the wife of A. E. Jones, twin boys. Curryville, A. Co. July 26, to the wife of Mr. Frank a son. Digby, July 31, to the wife of D. F. Young, a daughter. Gaanville, July 20, to the wife of John Middleton, a daughter. Canning, July 29, to the wife of A. V. Pineo, a

daughter. Tidnish River, July 22, to the wife of Bliss Wells, a West Bay, July 21, by Rev. A. McMillan, Colin J. McDonald to Christy Morrison.

New Glasgow, July 81, by Rev, A. Browman, Daniel S. Ross to Mary Fraser.

North Sydney, July 27, by Rev. Mr. Lane, George McDonaid to Margaret Boutilier.

Boston, July 4, by Rev. A. D. McKianon, Joseph Curren to Miss Coyle, all of N. S. West Roxford, Mass, July 25, by Rev. C. Habbard

Nettie L. Horton to Harry Hutchins. St. Stephen, July 23, by Rev. Thos. Marshall,

James McLaughlin to Jennie Davis. Brule N.S., Aug. 3, by Rev. J. W. Fraser, Charle's M. Carson to Agnes McClellan.

Nash's Creek, N. B., July 28, by Rev. J. M. Mc-Leod, Agnes McMulin to Maggie Harvie.

Port Hast ngs, C. B., Aug. 5, by Rev. John Calder Daniel H. Cameron to Maggie B. McIntosh.

## DIED.

Harmony, Aug. 1, Edward Gilchrist. Springhill, July 24, John Herrett, 62. Brenton, July 29, William Doane, 88. New Glasgow, Aug. 3, John Betts, 83. Richibucto, Aug. 1, James L. Bell, 21. Halifax, July 4, Rev. David Watters, 70. Lawrencetown, July 28, John Morgan, 84. Chatham, Aug. 5, John Fotheringham, 63. Middlefield, July 27, Mary Jane Huckings, 82. St Joan, Aug. 5, Jane, widow of W. T. Gay, 62. Halifax, Aug. 5, John A. son of William James, 14. Rossland, B. C. July 19, Eli Worth of Mabon, C. B

Halitax, Aug. 6, Ann, widow of Thomas M. Braine

Liverpool, Aug. 2, Ellen, wife of Jacob Publicover

Caledonia, July 29, Mary, widow of John McGinty

Greenfield, Aug. 2, Sophia, wife of Joseph Wynot,

Yarmouth, Aug, 1, Susan, widow of L. G. Swain,

Moncton, Aug. 7, Walter J. child of James Melan

Fredericton, July 22, Emma R. wife of James S. Beek 69. Springhill, N. S., Aug. 8. James William Hennes.

sey, 36. West Glassville, July 28, Sarah C. wife of Staten

Milton 33 Stellarton Jaly 30, Catherine F. widow of John

Cutton, 71. Alma, N. B. Aug. 2, Sarah C. wife of Capt. Hugh Shields, 73

Kingston, Kent Co., July 30, Jane, widow of James Giffora, 59.

Nicol River, July 31, Mary, wife of Alexander Hannay 32.

Archibald, 24 St. Stephen, July 30, Ruchel A. wife of Whitney

Robinson, 44. Maitland, July 27, Sarah Cotter, wife of Capt. Jas.

Campbell, 86, Fredericton, July 27, Victor A. son of Mr. and Mrs

S. A. Pardie, 4

Oakfield, C. B. July 27, Maggie, daughter of the late D. McNeil. Sussex, Aug. 1, the infant son of Mr. and Mrs.

Taemas Proctor. Beaver Mountain, N. S. Jaly 14, Mary, widow o Alex. Fraser, 75.

Lawrencetown, July 26 Victor V. son of Mr. A. L. Foster 18 months.

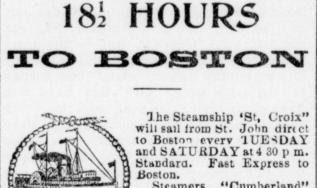
Pictou July 22, Christy McLeod, widow of Malcohm McDonald t7.

Chatham, Aug. 3, Laura, daughter of Mr. and Mrs. Wm. Woods 19 months. Calais, July 28, Mildred, daughter of Mr. and Mrs.

Geo. McKay 3 months. Halifax, Aug. 3, May Edaa, child of Mr. and Mrs.

F. Hawes, 10 months. Somerville, Mass., July 24, Sophia, daughter of

Mr. and Mrs. T. Crowe, 2.



Secretary and Treasurer. Lewis Whari, Boston

Yarmouth, N. S. June, 23rd 1897,

J. F. SPINNEY, Agent

Boston. Steamers "Cumberland" and "State of Maine" will sail tron St. John, for East-

NESDAY and FRIDAY morning at 8 o'clock, Standard, due in Boston about 4 p. m. next day. Connections made at Eastport with steamer for St. Andrews, Calais and St. Stephen.

Freight received daily up to 5 o'clock. C. E. LAECHLER, Agent.

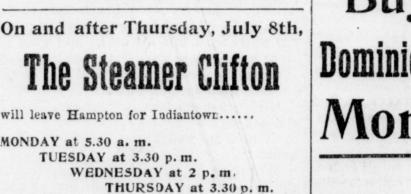
STAR LINE STEAMERS For Fredericton

#### (Eastern Standard Time.)

Mail steamers David Weston and Olivette leave St. John every day (except Sunday) at 8 a m. for Fredericton and all intermediate landings, and will leave Fredericton every day (except Bunday) at 7.30 a. m. for St. John.

A steamer of this line will leave Indiantown every Saturday night at 5.3) p. m. for Wickham and inter mediate landings, returning Monday morning, leaving Wickham at 5 a. m., arriving at Indiantown at 8 a. m., until further notice; one fare. Return tickets, good for morning or afternoon boat on Monday. No return tickets less than 40c.





SATURDAY at 5.30 a.m.

Will leave Indiantown for Hampton Tuesday at 9 a. m., Wednesday at 8 a. m., Thursday at 9 a. m. and Saturday at 4 p. m.

> CAPT. R. G. EABLE, Manager.

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Lve, Halifax 5.50 a.m., arv in Digby 11.55 a.m. Lve. Digby 12 05 p.m., arv Yarmouth 2 40 p.m. Lve. Halifax 8 00 a m., arr Digby 12 46 p.m. Lve. Digby 12 56 p.m., arr Yarmouth 3 00 p.m. Lve. Yarmouth 7.15 a.m., arv Digby 9.58 a.m. Lve. Digby 10.05 a. m., arv Halifax 4.50 p. m. Lve. Yarmouth 8 3) a. m., arr Halif x 3 30 p. m. Lve. Digby 10 25 a. m., arr Halif x 3 30 p. m. Lve. Annapolis 7.00 a. m., arv Digby 8.20 a. m Lve. Digby 4.45 p. m., arv Annapolis 6.05 p. m.

Pullman Palace Buffet Parlor Cars run each way daily on express trains between Halizax and Yar. mouth and Halifax and Annapolis. Staterooms can be obtained on application to

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K.SUTHERLAND, Superintendent.



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