The events in Natal of 100 years ago are of particular interest at the moment, as in those days the foundation was being laid of an agricultural industry which was destined to become one of the largest in South Africa. It is also of importance to realise that the cultivation of sugarcane was the early outcome of the trial of many crops, all of which eventually disappeared or only played a small part in the agriculture that evolved; and the object of this paper is to present a brief summary of the events in these historic days.

To attempt a history of sugarcane in Natal is now an almost inexhaustable and voluminous subject and considerably beyond the scope of a single paper. In this brief summary, therefore, our attention will be confined mainly to two aspects of the development of the industry; firstly, that of the early developmental stages of the agricultural side, and secondly, that of the introduction of varieties up till the time of the establishment of the Experiment Station.

It is not known for certain that true sugarcane was grown by the natives in the days prior to European settlement, but several references exist to two types of sweet-stemmed plants which were used by them, one of which, the "umoba," may have been such.

The earliest record of sugarcane is attributed to some Portuguese mariners who in July, 1635 were wrecked near the mouth of the Umzimkulu and found the natives cultivating "millet, maize, melons, beans, gourds and sugarcane."

Later, in 1787, it is recorded that vessels en route from England to Australia called in at the Cape and took on board "large quantities of young fruit trees and sugarcane."

The first to describe two sorts of cane was Nathaniel Isaacs, (who shared with Farewell and King the honour of founding Port Natal), in 1828, when he wrote, "The sugarcane is wild, and, I suppose an indigenous plant. They (the natives) do not cultivate it though the soil seems adapted for its growth, as it runs to prodigious height, and the cane is of large dimensions. They have two sorts, the one larger than the other; the former the natives call 'Moaba' and the latter 'Sinpha'."

"Sinpha" was probably "imphi" or sweet sorghum (Sorghum saccharatum) and "Moaba" may have been a sugarcane, the Zulu for which is "umoba."

Again, in 1838 J. N. Boshoff, who later became second President of the Orange Free State, described the growth in Natal of "a sort of cane, and Spanish Reed, which are indigenous," while in 1841 the Wesleyan Missionary, Rev. Archbell recorded the growth of cane in Port Natal, in abundance, and to the height of fifteen to twenty feet.

In 1843 Capt. J. C. Smith, in a report to the Governor of the Cape, to which Natal at that time was annexed, submitted that Natal was eminently suited to colonisation, giving as one of his reasons the manner in which sugarcane grew.

From these records it is obvious that some type of plant of a sweet stemmed nature was grown prior to the arrival of the European: further evidence of its cultivation by the Zulus in early times was that given to Bishop Calloway (when collecting material for his "Religious System of the Amazulu") by an old native, who when asked if they still worshipped uNkulunkulu (the Creator), replied—"Yes, they worship him. We love uNkulunkulu because we eat corn and mix it with our amasi; and kill our cattle, and eat our maize, and our sweet cane."

Whether these references are to true sugarcane or not is now a matter of conjecture, but the utilisation of this food plant by the natives had obviously suggested to early settlers the possibility of growing cane.

Prior to 1848 agriculture in Natal had been of a very scanty nature; oats for hay, and vegetables, were the chief cultivated crops, cattle rearing being apparently the main agricultural pursuit. The principal article of export was ivory.

The year 1848 marks a landmark in the history of the Durban and the Natal Coast, as it was in that year that the decision was taken to form an Agricultural Society, to experiment with economic plants in the hope of finding some suited to local conditions.

The first meeting was held in April of that year, when E. Morewood was elected President. At the next meeting it was decided to ask the Lieut.
Governor for a grant of 100 acres of land at Umlaas, a grant which was refused. A second request for land on the banks of the Umgeni was more favourably received, and in 1849 the first curator, Mr. Chas. Johnston was appointed, with the right to sell surplus products of the garden in lieu of salary.

In 1850 the Society decided to hold the first Agricultural Show when prizes were offered for displays of cotton, wheat, yams, oats, fruit, vegetables and sugar. The show, however, was a failure, and the society began to decline for want of support. Later, however, the young society was reorganised, the land near the Umgeni given up as being unsuitable, and new ground obtained at the foot of the Berea, where the present gardens are now situated. A new curator in the person of Mr. J. McKen was appointed, who apart from his initial training at Kew Gardens had experience in sugarcane growing.

It was he who was responsible for the introduction and trial of many East Indian and South American plants, such as mango, bread fruit, ginger, coffee, camphor, pawpaw, guava, cinnamon, blood orange, assam tea and black pepper. On the 1st of August, 1851, the first show was held in the Society's own grounds when many kinds of fruits were shown, and tobacco, wheat, rice, coffee, pistachio nuts, turmeric, arrowroot, cotton, ginger, and yams, but not sugar. Among newly introduced plants, arrowroot showed some promise and was being cultivated on some scale; an export trade was established, but the demand was not sufficient, and the price obtained did not warrant its continued cultivation.

During this time sugarcane cultivation had begun and was extending, and McKen subsequently resigned his post at the gardens to become manager of a sugar estate at Tongaat. This was in 1853. At a later date, however, McKen returned to the gardens, where he remained until his death in 1872. It is a matter of interest to note that McKen's original salary at the gardens was £50 per annum plus a hut, whereas he returned there at the greatly enhanced emolument of £150 per annum.

It is generally agreed that the first cultivator of sugarcane in Natal was Edmund Morewood. This gentleman had in 1839, together with the Landdrost of Durban, and others, secured from Panda a treaty of alliance, whereby the settlers pledged to support him in return for his aid against Dingaan.

He was appointed Harbour Master of Port Natal, a post which he occupied until the evacuation of Natal by the Dutch, when he turned to farming as an occupation.

His first planting of sugarcane appears to have been towards the end of 1847 and in 1856 his estate was sold by auction in a state of insolvency; the last that was known of Morewood was a brief statement that he was in Brazil.

During this period the name of T. C. Milner became prominent. Milner, an adventurous youth of barely 21 years of age had in 1845 purchased the brig "Sarah Bell" and sailed her to Natal. Trading between London and Natal for several years, he had the honour of carrying the first direct mail from London, and of introducing the first consignment of named sugarcane varieties into Natal. This, it has been suggested, was probably done by observation of the manner in which local canes, of whatever their nature, flourished in the hands of the natives. When the Sarah Bell arrived towards the end of 1847 from Mauritius and Reunion (then Bourbon) she carried a consignment of 40,000 cane tops for sale by public auction, of which Morewood appears to have been the principal purchaser. These must have been planted late in 1847 or early in 1848, according to a later report on their progress on Morewood's estate, which he had established at Compensation in the Umhlali district.

In 1852 McKen, curator of the Botanic Gardens, visited Morewood on the 29th May, and spent three days inspecting the plantation prior to writing a report for the Agricultural Society. The varieties grown were Bourbon, Ribbon, Otaheite, Batavia and Creole, 404 acres being plant cane and one acre 1st ratoon. Of these, 204 acres were 17 months old, and ripe, and all were considered by McKen to be equal to anything he had seen in Jamaica.

McKen spent two days in the boiling house and made some sugar from the Creole cane. He was the first cane tester in Natal, and submitted the following figures:—

<table>
<thead>
<tr>
<th>Cane</th>
<th>Weight of cane</th>
<th>Yield juice</th>
<th>Density</th>
<th>Cured sugar</th>
<th>Molasses produced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creole Cane</td>
<td>1,600 lbs.</td>
<td>100 galls.</td>
<td>11</td>
<td>110 lbs.</td>
<td>50 lbs.</td>
</tr>
<tr>
<td>Bourbon Cane</td>
<td>100 lbs.</td>
<td>27 qts.</td>
<td>10</td>
<td>Experiment not concluded.</td>
<td></td>
</tr>
</tbody>
</table>

McKen further stated that "if the canes were thoroughly trashed and cleaned the yield would be even more." Thus even at the commencement of the sugar industry this question of clean cane arose! The maximum crushing capacity was estimated at 250 gallons in 10 hours, with rollers 18 inches long cut from ships' masts and driven by 4 natives, but an acceleration in crushing rate was anticipated by alterations which would permit the introduction of horse or cattle power. The report, however, considered that the venture had succeeded beyond the most sanguine expectations, and should yield a profitable return: three tons per acre it was considered could be expected.

In the year 1852, the first Natal molasses, produced by Morewood, was sold in West Street,
Durban, by Messrs. Huntley and Handley, to the extent of 4 cwt., and later in the same year some sugar was sold. This caused no little interest in the young colony; and when in that year at the annual dinner of the Agricultural Society held in the Royal Hotel (then McDonald's) a sample of Natal sugar was exhibited after the usual toasts, much enthusiasm was shown for the prospects of sugar growing. About the same time, however, one pessimist ventured the opinion that "he should as soon expect to see fowls ready trussed and cooked flying in the air as to see the sugar cane profitably cultivated in Natal." This question was soon to be settled.

On May 29th 1852, a public meeting of the inhabitants of the Compensation district was held on Morewood's estate, and many optimistic speeches were made by men with experience in sugar cultivation in Mauritius, Egypt, and elsewhere; and resolutions were passed insisting on the necessity for good roads, bridges and labour. It was thus obvious that Morewood, although he himself was not destined to play any further part in the development of the industry, had inspired others with confidence in its future.

Sugar cane cultivation now began slowly to spread; in this same year, 1852, three settlers on the Isipingo flats, Messrs. Platt, Mack and Burkett sent an ox wagon up to Compensation and purchased 3,000 to 4,000 cuttings at £3 per 1000, of the varieties Bourbon Yellow, Bourbon Purple, Ribbon and a fourth which for want of a name they called Green Natal; this latter became the favourite cane up till 1870. Again in the same year Mr. M. Jeffels planted two acres of cane at Isipingo with setts obtained from Morewood, and further, in August of the same year did some further planting with imported cuttings. These were introduced once more from Mauritius in the Jane Morice, chartered by Messrs. Henderson, Smerdon, Knight and King, and consisted of a consignment of 15,000 tops. According to Jeffels, some of these provided the start of Milner's plantation at Springfield, but according to others, the start of this plantation was with cuttings from Morewood.

Early in 1853 an Ordinance was enacted by the Governor of the Colony for the establishment of a company—The Natal Sugar Company; this however did not receive support from the Colonial Office of the British Government, and the project fell through. However, the company was eventually floated on a small scale and a mill established and sugar made on the Springfield flats.

In 1854 the Editor of the Natal Mercury wrote "The time is rapidly approaching when the sugar enterprise in this Colony will yield results which will for ever put to silence the doubts of those at a distance who have hitherto questioned the adaptation of the soil and climate of Natal for this production." By 1855 sugar cane occupied an increasingly important part in coastal agriculture and the Natal Blue Book for that year stated that the only improvement in agriculture worthy of note was the cultivation of sugar and indigo instead of wheat, beans and other crops. Small, cattle driven mills were beginning to spring up, but these were soon replaced by steam driven mills. The following table shows the progress of the young industry from its start up till 1859.

<table>
<thead>
<tr>
<th>Year</th>
<th>Approximate acreage under cane</th>
<th>Total production</th>
<th>Quantity exported</th>
</tr>
</thead>
<tbody>
<tr>
<td>1856</td>
<td>£2,777</td>
<td>1,105</td>
<td>389</td>
</tr>
<tr>
<td>1857</td>
<td>1,743</td>
<td>1,922</td>
<td>312</td>
</tr>
<tr>
<td>1858</td>
<td>3,975</td>
<td>3,126</td>
<td>527</td>
</tr>
<tr>
<td>1859</td>
<td>7,810</td>
<td>4,112</td>
<td>1,173</td>
</tr>
</tbody>
</table>

In 1859 Victoria County had 2,039 acres under cane and 9 mills: the largest estate was at Tongaat with 250 acres under cane; the County of Durban had 1,957 acres and 15 mills, and at Isipingo there were 8 mills; it was stated that there one could "ride through 6 miles of sugarcane in one continuous stretch." Planting commenced on the lower Umkomazi in 1856, but it was becoming evident by this time that the tendency was to go northward.

Further, cultivation was extending from the flat lands to the hill slopes, particularly in Victoria County. The main extension, however, was along the coast. It was known that inland areas were more subject to frost, and that a better rainfall was obtained nearer the coast; further, the nature of the country inland rendered transport difficult and cane fields had to be within easy reach of Durban. Also the flat lands were easier to cultivate with the implements then available to the grower.

As has been stated the varieties grown were originally obtained from Mauritius or Reunion. They were principally the Bourbon Yellow, Purple, and Ribbon, and the one which became known as Green Natal.

The origin of this cane is open to conjecture, it having been suggested that it was the descendant of the "umoba" referred to by early writers. One writer has derived it, however, from the Otaheite, imported by Milner. It has subsequently been identified as Light Preanger, a well known variety in olden days in several countries.

In these days cultivation was largely on the flats, the early settlers being of the opinion that only these lands would produce a cane crop, and under these conditions the varieties grown appeared to be suitable. The Bourbon Purple was soft and juicy, and yielded 4 tons of sugar per acre. As cultivation...
spread to the hills however, this cane lost favour and could not stand up to these new more exacting conditions. Bourbon Purple, however, seemed more adaptable, and did well both on hillsides and on sandy soils. Green Natal, however, became favourite, and remained so till about 1870.

As has been stated, the early cane fields were on the flats. A serious drawback to these situations, however, soon became apparent in that they were subjected to flooding, and in serious floods in 1856 many canefields were destroyed. Again where canefields adjoined hill slopes grass fires became a menace, and so for a time the tendency was to avoid these situations and to plant along river banks, and in valley bottoms. Frost now played a part, and in 1863 severe losses were recorded in these areas.

However, when it was realised that cane would thrive on hillsides cultivation once more spread; a further impetus was given to the industry by the cessation of hostilities in Europe in 1856, and a greater flow of immigrants and capital into the Colony was experienced. Labour difficulties, however, presented themselves; in 1865, a period of depression set in and unemployment was rife. A contributory factor was the decline in Natal cotton, which had been enjoying a good export trade during the American Civil War, but which with the conclusion of the latter faced difficulties, and most of the cotton growers became sugar growers. Competition with Mauritius had to be faced, but in 1867 an increase on the import duty on sugar gave greater protection and by 1870 the industry was on its way to recovery. In this year 15,892 acres were under cane of which 5,800 acres were cut and 7,823 tons of sugar made. The industry therefore was firmly established, and from now on rapidly developed.

Returning to the question of varieties, the next to be introduced after the early introductions from Mauritius was that which became known as China cane, which appears to have been about 1864. The origin of this variety is doubtful, but it seems to have derived its name from a belief that it was introduced from the East. Others again maintained that it was the descendent of the canes grown by the Zulus, while yet another origin attributed to it was that of being washed ashore from the wreck of the Aristo, from Borneo. Whatever its origin, it became very popular, and by 1870 it had become one of the main varieties. It grew well in poor soils, or sandy flats where other varieties were unprofitable, and a 7th ratoon crop was recorded in one area in 1871, yielding up to 3 tons of sugar per acre. It appears, however, to have been quite susceptible to frost.

In 1867 the varieties chiefly grown were listed as China, Otaheite, Penang, Ribbon and Green Natal, the latter being the favourite. In 1873, a further importation was made from Mauritius, consisting of Poudre D’Or—a yellow variety of good sugar content, early ripening, but of poor keeping qualities; Bois Rouge, a red cane; Iscambine, a claret coloured long-jointed cane; Horne, a striped cane; Purple Queen; and Giraffe, a vigorous grower of low sugar content. A further importation was made in 1880 of the varieties Louisier (Otaheite); Port Mackay (Cavengerie); Gold Dust, a white and red striped cane; Rose Bamboo (Light Preanger); White Queen; and White Tanna (Yellow Caledonia). Other importations from Mauritius about the same time consisted of Fotiogo, Imperial, Tamarind and Belle-Ougete (Black Cheribon).

About the year 1877 a new complication arose in the form of a disease—smut disease; this was more severe on China cane than the other varieties, and ultimately led to its abandonment. The disease was most severe in the Inanda division. It appears to have been controlled in the more resistant varieties by removing and burning the diseased stools, but in the more susceptible China cane the variety was given up, and a search was made for others. Daniel de Pass, at Reunion, received cane tops from various parts of the world, among which was one destined to radically alter the variety position—the one which eventually became known as Uba, a cane from India. This was in 1883, but it also would appear that in 1884 or 1885 the Governor, Sir Chas. Mitchell, returned from India with two Wardian cases in which canes were growing. These were propagated by the Curator of the Botanic Gardens, Medley Wood, and given to Wilkinson of Ottawa; among these was also reported to be the Uba cane. If this is correct, then this variety was imported on two occasions, and adds further confusion to the derivation of the name. The word Uba has variously been derived from the names, Durban, Poona, Jubbalpore, Vuba or Viba, (the Brazilian for ‘reed’). Another introduction in 1884 was of the variety known as Elephant cane, which was imported by Medley Wood through the Botanic Gardens at Kew.

In 1902 the Natal Department of Agriculture took an interest in sugarcane variety introductions and importations from the West Indies, British Guiana, Mauritius, Queensland and Hawaii. These comprised the Antigua varieties B.15, B.95, B.109; the Demerara canes D.74, D.95, D.108, D.145, D.625; Queensland No. 2 and No. 3; Honolulu Rose Bamboo and Honolulu Lahaina, and a further importation of Horne. In 1903 a sub-tropical agricultural Experiment Station was started by the Government on the South Coast at Winkle Spruit, which carried out analysis of many varieties grown at that time. In 1909 three Java canes were imported from Egypt, J.105, J.147, and Cheribon; and Zwinga, a Japanese cane, was introduced from Louisiana. In 1911 a large number of Indian varieties were brought in comprising Kewalu from Benares, Madrasi from
Lucknow, Matua from Cawnpore, Mango from Shahganj, Dhaura from Azangarh, Chin from Rudanti, Kuswar from Partabgarh, Sarantii from Basti, and Agaul from Sultanpur. Of all these, only Agaul became grown on any scale. The main variety during this period was Uba, which had expanded rapidly from the time of its introduction; but about the year 1913 it was felt that further introductions should be made in case this popular variety should develop any fault. It was decided however that stricter control over importation should be exercised, to avoid the possibility of introducing any disease. Up till now, there was no control, and varieties could be imported in large quantities; thus in 1902, 597 sacks of cuttings passed through the Port of Natal.

By 1914, when the Natal Sugar Association was in existence, active co-operation between that body and the Department of Agriculture began in the introduction of new canes under supervision. A piece of land was obtained in the Eastern Vlei, Durban, and planting began after an initial fumigation and disinfection of the cuttings. Under this arrangement new varieties could only be introduced through the Association; if the introduction was at the request of a grower, he was entitled to half of the crop grown on the experimental area, the other half being distributed among members of the Association—this after they had been passed by the Government officials. The first to take advantage of this new arrangement was the Tongaat Sugar Co., who arranged for some introductions from the Argentine. Seven varieties were established in the quarantine grounds; unfortunately a rainstorm destroyed the writing on the labels used, so that it is not known what all of these canes were; four are known for certain however—P.O.J.139, P.O.J.36, P.O.J.213 and R.C.719. The first issue of these was made in 1916.

In the same year some cuttings of Daniel Dupont from Queensland which had been introduced were so badly damaged on arrival that they were planted in Pretoria instead of sending on to Durban. Only one plant was developed, and sent to Durban later where it was reported to be growing very badly.

In 1917 four seedlings of Uba from Mauritius were planted. These resulted from plants of Uba which has been grown in Mauritius from Natal cuttings sent by the Principal of Cedara College of Agriculture, it being realised then that Uba did not produce seed in this country. At the same time the variety Sin Nombre was introduced from Mauritius. In 1918 Agaul was distributed from Winkle Spruit; the Mauritian canes were reported to be growing very poorly, and an application for further supplies was made to the Department of Agriculture, as well as for some of Barber’s crosses of tropical and Indian canes. In this year mosaic (then called yellow stripe) was reported by Wuthrich. Some canes, unspecified, were also planted in the Quarantine Station from Jamaica, at the request of a Umtolozi planter. In 1919 this Quarantine Station was closed down owing (among other reasons) to difficulty of supervision, and in 1921 the Winkle Spruit station was closed. Introductions still continued, however, and in 1923 some Queensland varieties were grown at Natal Estates, among which were the well known D.1135 and 1900 Seedling; at La Mercy were some Mauritian seedlings and in the Botanic Gardens were some new varieties from Java. A revival of the Quarantine Station on the Eastern Vlei was attempted, as we read that in 1923 some canes planted there did not grow.

In 1924 a census of varieties grown commercially shows that Uba predominated, but in addition were Green Natal, Agaul, Argentine canes, P.O.J.213, D.74, a Mauritius Seedling, Port Mackay, and “mixed varieties.”

By this date, however, mosaic disease was well known, and in 1923 was reported to be widespread in all the “soft canes,” Uba alone being free. By this time, also, the South African Sugar Association was in existence, and the decision was made that in conjunction with the officers of the Department of Agriculture, from that time onwards all varieties would be imported only under the strictest supervision. With this object in view the present Quarantine Glasshouse was erected in 1925 in the Botanic Gardens, the Experiment Station was started, and now all importations are subject to rigid quarantine regulations, and are tested thoroughly before being issued to growers for cultivation.

From the early days of private introductions to the present system of organised control of new varieties, it is thus seen that many varieties were given a trial; at least seventy had been introduced prior to the establishment of the Experiment Station. Many we know now could have had no hope of survival; these efforts were not wasted, however, as they have given us information on the type of cane that Natal requires, and have provided a background on which the policy of determining further importations could be based.
The President thought the paper of considerable historical interest, particularly because it was now one hundred years since cane was first introduced into Natal. It was desirable that a survey of the early days should now form part of the records of the Association.

Mr. Rovston related that he had recently had a visitor from England in the person of a Mr. Miller Stirling who had produced an old faded document showing that his father had been born at Oaklands, Umhlali, in 1850. He had said that the Millers had started growing cane at Oaklands and this was the first cane grown at Umhlali. Morewood is credited with growing the first sugar cane in Natal at Compensation, which is some five miles away. Mr. Miller Stirling's grandfather had obtained a few cuttings from Morewood to start his plantation at Umhlali. Mr. Miller was partner of Mr. Milner and was credited with having sold some of the first sugar to be marketed in Durban.

Dr. Dods said that the story of the beginnings of our industry was one which afforded scope for some enterprising person to write the history of the early days of the Natal Sugar Industry.

The writings of Nathaniel Isaacs were of great interest, but he thought that what that author imagined to be sugar cane, was unlikely to be that, for the plant required more agricultural care than it would have received in those days.

Holden's claim that he first introduced sugarcane into this country from Mauritius in 1847, was more likely to be correct. There were probably others who had imported sugarcane earlier into the settlement, but they could hardly have been propagated permanently.

Dr. McMartin had pointed out that even in the very early days there were complaints about cane being trashy. It was also stated that cane was being milled in those days before the end of May, which we now know to be too early. Unfortunately, that wrong practice had persisted until the present time.

It would be interesting to know the origin of "China cane," which the late Mr. Alfred Townsend was growing in quantity when the Experiment Station was started some twenty-three years ago. It was still in the Stations' collection and it might be worth while to try and identify it by sending specimens abroad.

Among importations by Natal Estates in 1923, from Queensland, were Badilla and D1135 canes, which however failed, partly because of susceptibility to Mosaic disease.

Mr. Moberly thought one lesson which the paper taught was the ease with which records got lost, and how difficult it was to establish in later years what exactly had taken place. Even events which had occurred in 1923 were doubtful. We should therefore be careful to keep all records.

With regard to the word "Moaba," he did not think much reliance could be placed on this name. Any new plant arriving in the country which the Zulu of old had not seen before, would be given the Zulu name of anything it most closely resembled.

Mr. Murdock Hill told the meeting that at Renishaw they had an old roller dated 1860. This was mounted on a square shaft and was about fifteen inches in diameter by some eighteen inches long. He understood that about ten sticks of cane were fed at a time into the old mill of which this formed part and they were taken back and put in again, and this was an early version of double crushing.

Mr. Rault enquired the origin of the term "dumb-turner." He had heard one old West Indian planter say that the old slaves who had to return the cane for re-crushing complained, whereas the metal bar now used was dumb.

Mr. Roberts related that he was stationed at the old sugar Experiment Station at Winkelspruit in 1912. In those days Uba was the only cane thought to be of commercial significance in Natal, but the sweetest and brightest canes were the big yellow ones from Queensland.

Mr. Moberly said that on one occasion he was asked to go and see the remains of an old mill at Glendale. There, in a clearing in the cane, was the remains of an old battery. There were three open boilers or pans, two of which were of copper and the other of iron. Nearby was a three-roller mill, very rusty, but which could still be turned by hand through gearing. Lying on the ground was an old paddle which appeared to have been used for skimming froth from the surface of the boiling liquor. Another item was the remains of a grocer's scale which might have been used for weighing out lime.

The Association decided if possible, to procure this collection of the remains of an old mill at Glendale. There, in a clearing in the cane, was the remains of an old battery. There were three open boilers or pans, two of which were of copper and the other of iron. Nearby was a three-roller mill, very rusty, but which could still be turned by hand through gearing. Lying on the ground was an old paddle which appeared to have been used for skimming froth from the surface of the boiling liquor. Another item was the remains of a grocer's scale which might have been used for weighing out lime.

The Association decided if possible, to procure this collection of the remains of an old mill, so that it could be preserved as an item of historical interest. However, when he and Mr. Booth visited the locality for this purpose, they found that they were too late. An Indian had bought the plant, sold the copper vessels and refused to part with the iron pan and rollers. It would be interesting to know of other relics of this nature which should be kept as objects of historical interest. When he was in Louisiana he saw an iron kettle, similar to those he had examined at Glendale, in which the first granulated sugar had been made by de Bore. In Louisiana this had been preserved, and he would like to see the Association.
take steps to preserve similar things of historical interest for the benefit of posterity.

Dr. McMARTIN thought that an interesting collection of photographs might be made of all the old mills. Several people had pointed out to him remains of what were sugar mills sixty years ago.

Mr. Lewis said that Mr. G. J. Crookes had told him of the early days when sugar was made in open kettles such as those described by Mr. Moberly, over open fires, and paddles were used to remove the scum from the boiling juice. Before centrifugals were introduced, Mr. Crookes related, one could trace the track of the wagons on their way to Durban by following the trail made by the molasses dripping from the sugar on its way from Umzinto.