LIVERPOOL OF THE CAPE
Port Elizabeth harbour development 1820-70

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Master of Arts Degree

by

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ABBREVIATIONS

ABL&FCo  Algoa Bay Landing and Forwarding Company
ABL&SCo  Algoa Bay Landing and Shipping Company (Limited)
actg    acting
asst eng  assistant government civil engineer
AYB    Archives Year Book
BB    Cape Blue Book
CA    Cape Almanac
CTCC  Cape Town collector of customs
dep    deputy
DSAB  Dictionary of South African Biography
GG    Cape Government Gazette
gov    governor
govt eng  government civil engineer
govt sec  secretary to government
EPBCo  Eastern Province Boating Company
EPR  Eastern Province Herald
EPN  Eastern Province News
GTJ  Graham's Town Journal
lt gov  lieutenant governor
PC  port captain
PE  Port Elizabeth
PEBCo  Port Elizabeth Boating Company
PECC  Port Elizabeth civil commissioner
PEHB  Port Elizabeth harbour board
PEHM  Port Elizabeth harbour master
PEPL  Port Elizabeth public library
PESC  Port Elizabeth subcollector of customs
RCC  Records of the Cape Colony (Theal)
RS  Rixdollar
sch    schedule
SCR  select committee report
sec    secretary
SESA  Standard Encyclopaedia of Southern Africa
supp  supplement
TB    Table Bay
UBCo  Union Boating Company
UCC  Uitenhage civil commissioner

GLOSSARY

BREAKWATER: object breaking force of waves — especially groyne or pier
GROYNE : timber framework or low broad wall run out to check drifting of beach and so stop encroachment of sea
JETTY : i. pier or mole run out to protect harbour or coast ii. landing pier
MOLE  : i. massive structure, usually of stone, as pier or breakwater ii. artificial harbour
PIER  : i. structure of iron or wood open below running out into the sea and used as promenade and landing stage ii. breakwater, mole
SHIELD : structure protecting jetty, pier or wharf
WHARF : wooden or stone platform beside which ships may be moored to load and unload
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NOTE ON FOOTNOTES

Footnotes numbered within the text are to be found at the end of each chapter. The footnotes have been categorised into two types:

Reference: the use of ( ) brackets around a footnote number within the text signifies that it merely refers to the source of the item or statement.

Supplementary: the use of [ ] brackets around a footnote number signifies that additional information is contained in the footnote.

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1. INTRODUCTION
1. **INTRODUCTION**

In the 1980s, especially with the motor industry in the doldrums, Port Elizabeth could be described as South Africa's Cinderella city. Few people, however, realise the key role she played in the South African economy just over a century ago when agriculture was king and the mining revolution still something of the future. At the time it was locally believed that Port Elizabeth was "the most important spot in the colony - not the Liverpool, but the New York of the Cape."(1) Unfortunately, her fairy tale rise to prominence soon went drastically wrong:

Aided by a fairy godmother in sheep's clothing, this Cinderella triumphed over the wicked designs of her Table Bay stepmother's attempts to promote the Kowie and East London when she became belle of the Cape trade ball hosted by Prince Economics. But at midnight the ox wagon turned into a steam train which the prince hijacked to seek his fortune on the diamond and gold fields. Port Elizabeth's humble sheepskin slipper was overlooked in the rush and instead of the traditional ending, the prince made a marriage of convenience to Durban who had not even been invited to the Cape economics ball because her fairy godmother's magic cane was not able.

Fairy tales aside, this study is an analysis of Port Elizabeth harbour development during its first half century from 1820-70. Despite the fact that Port Elizabeth quickly came to dominate Cape trade, very little was actually done to improve its port facilities. Superficially the impression one gains from the available material is that everything was done by government not to develop a harbour at Algoa Bay. But the real question is: was harbour development really necessary at Port Elizabeth during the period under consideration? The answer must be no. The lack of facilities certainly did not hinder the massive expansion of wool exports that took place before 1870.
Although not a natural harbour, Algoa Bay was a safe roadstead for most of the year because it was protected from all but the south-easterly wind which hardly ever blew between March and September. On the other hand, the Cape's busiest port, Table Bay, without some kind of artificial protection, was downright dangerous for ships during the winter when the northwesterly wind prevailed. The safer Simon's Town in False Bay was too inaccessible to be viable as a major port for the colony's most densely populated region. Thus harbour development was vital to Cape Town, whereas at Port Elizabeth it would merely add to the convenience of shipping. It is therefore not surprising that what harbour development there was at Algoa Bay made no attempt to protect shipping as such. The first jetty (1837-43) really only expediated the landing of passengers while the breakwater (1855-67) was designed to protect small boats using the landing beach. At Cape Town harbour improvements from the outset involved the actual protection of shipping.

Furthermore Port Elizabeth was badly placed strategically as far as the authorities were concerned. She was too far from the turbulent frontier region. For this reason the government continually tried to develop ports with fewer natural advantages further east at the Kowie, Waterloo Bay and East London - see map of 19th century Cape coast navigational conditions. Algoa Bay might have disappointed the military strategists but it suited mercantile interests ideally. Port Elizabeth was the gateway to an interior which was producing an ever increasing amount of wool to a rapidly industrialising world. Cape Town, on the other hand, was cut off from the interior by a series of mountain ranges.[2] Districts such as Beaufort West, although closer to Cape Town, were forced to trade with a more accessible Port Elizabeth. The unsettled frontier and fewer natural advantages prevented ports further to the east eclipsing Algoa Bay's dominant position. For so long as the ox wagon was the dominant form of transport and wool the major export, Port Elizabeth held the key to the interior. The discovery of diamonds and the onset of the railway age heralded the beginning of the end. Soon Cape Town and East London could compete on an equal footing. Finally, when South Africa's economic centre moved to the gold fields of the Witwatersrand, two
NAVIGATIONAL CONDITIONS ALONG THE CAPE COAST (19th century)

Clarke (1977) p 152
more rival ports entered the picture - Durban and Lourenço Marques. Thus the "Liverpool of the Cape" was forced into the wings of South Africa's economic stage.

This study goes through the actual mechanics of Port Elizabeth harbour development in great detail. To date no single work adequately covers the topic. The exact chain of events behind early Port Elizabeth harbour development is obscured by a number of complications. Firstly, most of the official harbour documents were destroyed in a fire which gutted the Port Elizabeth public office in 1854.[3] Secondly, there was no local newspaper until the Eastern Province Herald was founded in 1845. The only newspaper in the region was the Graham's Town Journal which began publication in December 1831. Finally, most historians have adopted Sir George Cory's version of the development of Port Elizabeth's first jetty.[4]

Soonike's Maritime History of Port Elizabeth does cover harbour development from earliest times through to the 20th century, but, it is limited in that it almost solely relies on archival material. Rush's Aspects of the growth of the trade and development of ports in the Cape Colony, 1795-1882 only gives a general outline of Port Elizabeth developments which, in addition, is tainted by the Cory myth.

Because the separatist movement has loomed so large in most studies of eastern Cape history, the movement is covered in a brief introductory survey. Although the lack of Port Elizabeth harbour development inevitably became linked to separatism, as such, it was a very minor aspect of the whole issue. Even the potential viability of a separate Eastern Province as a result of its growing economic strength, did not unify the movement into a cohesive group. Separatism in fact was a political vehicle used by numerous people at various times for different reasons.

To date Grahamstown has dominated eastern Cape history because it is the oldest seat of learning in the region. Thus there is a wealth of local material. Unfortunately there is a distinct lack of original material on Port Elizabeth personalities. There are, for example, no
INTRODUCTION

Korsten, Fleming, Harries or J O Smith papers. Only Paterson and Chase have received any real attention. Very little is in actual fact known about Port Elizabeth's merchant princes while much has been made about the contribution of Cape Town and Grahamstown entrepreneurs. The extent of Port Elizabeth merchant wealth is unknown. But large sums of money were involved in Port Elizabeth insolvency cases during the great recession of the mid-1860s. Just one newspaper report is an adequate example: claims against J S Kirkwood amounted to £81000, T W Gubb & Co £53000, Perkins, Ogilvie & Co £46000,(5) while those against John Paterson were £75000.(6) Virtually nothing has been written about J O Smith who was probably Port Elizabeth's wealthiest merchant. Apart from owning a fleet of small ships and dabbling in Namaqualand copper, one of his deals alone, netted him an estimated £40000 in the 1840s. Because it would clash with his business interests, he in fact declined a legislative council seat at the time William Cock accepted one in 1847.[7]

TRADE:
The lack of material has meant that the specifics of Port Elizabeth trade remain an unknown quantity. Therefore in this study trade has been treated in general terms to demonstrate that it expanded despite the lack of port facilities. The sheer scale of wool exports obviously made everything else pale into insignificance. Unfortunately there is insufficient data to analyse Port Elizabeth's imports to the same extent as exports. To date Algoa Bay's imports and exports during the 19th century have received little real attention. Bock's The foreign trade of South Africa since 1807 only looks at total Cape trade while Soonike (undated) and Rush (1974) give Port Elizabeth trade passing attention. Although Port Elizabeth dominated Cape trade in the 1860s, Cape Town remained the true tavern of the seas. The number of ships calling there always far exceeded those anchoring off Port Elizabeth.

The very nature of east Cape exports - bulky goods produced in the distant interior - made inland transport far more crucial to the success or failure of trade than port facilities. In this respect, the government did improve the road system once the wool boom was
underway. Thus while most harbour development took place at Table Bay, the eastern Cape got its fair share of road expenditure over and above the construction of the road that connected the two provinces together.[8]

LANDING AND SHIPPING:
Despite the various local attempts to improve port facilities, the actual method of landing and shipping goods at Port Elizabeth changed very little during the half century under consideration. Goods, and passengers for that matter, were loaded over the side of ships at anchor into surfboats. Once the operation was completed, the fully laden surfboat was then propelled to the landing beach at Markham's cove [9] just north of the Baakens mouth by means of warps fixed between the shore and buoys in the roadstead. Once beached, the boats were unloaded by labourers who waded through the shallows. Shipping entailed the reverse process.

The first jetty (1837-43) would not have handled very much of this traffic during its brief existence while the breakwater (1855-67) did not provide quay space for the surfboats. Its main function was to protect the landing beach from rough seas. Thus the landing and shipping process from the beach remained unchanged. Passengers, however, were saved the rigours of being carried through the surf on a labourer's back because various sets of landing stairs were provided along the breakwater. Small ships actually anchored within the breakwater's protection before the silting problem arose. But they would have been serviced in the same way as the ships out in the roadstead.

Initially government boatmen were responsible for all landing and shipping. The expansion of trade during the 1820s saw private individuals take over the task. When the wool trade took off in the 1840s, the boating establishments were in turn replaced by boating companies whose shares were held by prominent merchants who guaranteed business.[10] This scheme of things meant that merchants actually had a vested interest in the method of landing goods. The ultimate motivation for change was the system's dependence on the
Mfengu for beach labour. Beach work was extremely strenuous and therefore high wages had to be paid to those prepared to do it. In time the Mfengu used strike action to push up their wages even further. As a result the merchants looked to alternative methods of shipping goods. They believed that jetties would provide a less strenuously labour intensive solution. Therefore the boating companies would no longer be dependent on one source of labour. Ironically, the breakwater did not achieve this. Instead of providing jetty space for handling goods, it merely protected the landing beach. The problem was that the scale of the scheme changed in the course of time. In the end it was found to be too small as a harbour and too big to handle boats. Ultimately it was the construction of jetties to replace the breakwater and the influx of alternative labour that broke the might of the Mfengu beach labourers. In time the boating companies were themselves taken over by the harbour board.

HARBOUR DEVELOPMENT: 1820-70
The bulk of this study covers physical harbour development from 1820-70. All the projects were initiated by private enterprise. During the 1820s and 1830s the Cape treasury was in no position to finance any major public works. In addition, Port Elizabeth trade during this period did not really warrant any improvement to port facilities. As it turned out, by forcing the pace, private enterprise probably delayed harbour development by a century. The first jetty (1837-43) was financed and built by local entrepreneurs. When it was destroyed in a storm shortly after being completed, the risky nature of harbour development was well and truly demonstrated. Although increasing wool exports prodded the government into creating the Port Elizabeth harbour board in 1847, it took almost another decade for official opinion to be swayed into doing something positive about port facilities. It was private enterprise, however, that actually set the ball in motion. The breakwater (1855-67) grew out of the 1853 Port Elizabeth Wharf Company scheme to build a causeway south of the Baakens to protect the landing beach. As it was, the harbour board received very little aid from the government apart from guarantees for their loans. They were even denied the use of convict labour.
After the breakwater was rendered useless by silt in 1867, it took the government another half century to sanction any major harbour construction at Port Elizabeth. In the meantime she had to make do with three landing jetties built during the last quarter of the 19th century.

Although harbour development between 1820 and 1870 revolved around two projects, the first jetty (1837-43) and the breakwater (1855-67), there were numerous other attempts to improve port facilities. Moorings laid in the roadstead during the 1820s proved to be a failure. Thus the authorities were loath to accede to requests for more to be put down in the 1840s. A scheme to build a jetty in the early 1830s never saw the light of day because the promoters were apparently unwilling to listen to professional advice from the deputy surveyor general. After the first jetty was destroyed in 1843, a local merchant, J O Smith, had his own private dwarf jetty built but it was made ineffective by periodic silting. The project was abandoned when the government refused to give permission for a replacement to be built in 1849.

Meanwhile the rapidly expanding wool exports had enticed the government into taking an interest in Port Elizabeth harbour development. The energetic secretary to government, John Montagu (1843-52), encouraged the local resident magistrate, an ex-naval captain, William Lloyd, to draw up a plan.[13] Shortly afterwards the government appointed a commission to inquire into harbour improvements at Algoa Bay. Although the commission never completed its investigation, one of its members, the harbour master, Lieutenant W P Jamison (1845-47), put forward a scheme of his own.[14] The government eventually made its intentions known when the first "Commissioners for improving the Port and Harbour of Algoa Bay" were appointed by the government at the end of 1847. In due course the government engineer, George Pilkington, was ordered to look into the whole issue of port facilities. He came up with a scheme for a shielded jetty.[15] Local support for the scheme was abandoned when the government proposed to finance it from a wharfage tax. In 1852 the harbour board decided to support a more moderate scheme proposed
by one of its own members, Captain E H Salmond.[16] Frustrated by the harbour board's lack of progress, private entrepreneurs formed the Port Elizabeth Wharf Company to build a breakwater south of the Baakens to protect both ships and the landing beach.[17] The imminent approach of representative government, however, delayed the project.

Once representative government was achieved, there was a distinct change in the government's attitude to Port Elizabeth harbour development. The governor, Sir George Grey (1854-61), immediately proposed that harbour development should be carried out by a re-constituted harbour board with the right to raise revenue to finance any construction that took place. The harbour board thus invited interested parties to give their opinions on a number of proposed plans. The consensus of opinion was that a breakwater should be built south of the Baakens to form a boat harbour and protect the landing beach.

Preliminary work on the pile breakwater began in late 1855. But by 1859 plans were drawn up for a massively enlarged scheme which included a protective shield at the end of an extended breakwater. Two jetties at right angles to the breakwater and a quay along the landing beach were designed to facilitate the handling of goods. During 1861 the fateful decision was taken to fill-in portions of the breakwater with stone to prevent silt being deposited in its lee.[18] There were, however, growing doubts as to the ultimate feasibility of the scheme as silting became a major problem. Various engineers were consulted and the planned jetties abandoned because they would hinder dredging. As a result the scheme became too big to handle lighters as was originally planned. Eventually in a desperate attempt to save the works from silting up completely, the harbour board decided in 1864 to fill-in the breakwater completely from shield to shore. By the time the board reported the completion of the scheme in mid-1866, large vessels of up to 500 tons were using the inner basin despite the silting problem.[19]

New plans to overcome the silt were submitted to the government during 1866 and an act was duly passed to enable the harbour board to
raise the necessary finance. Matters, however, were brought to a premature head in November 1867 when the Baakens came down in flood. The inner basin was rendered useless by thousands of tons of silt. The government immediately appointed the eminent British harbour engineer, John Coode, as consulting engineer. He despatched Charles Neate to inspect the damage. Neate recommended that a gap be opened in the breakwater to scour out the silt from the inner basin. He also suggested that a jetty be built off Jetty Street to temporarily facilitate shipping goods. Because of the urgency involved, Neate's suggestions were immediately implemented.[20]

Meanwhile Coode set about designing new harbour works based on information gathered by Neate. He presented his massive £442745 enclosed harbour scheme in February 1870. But the government decided that railway development took priority. Thus landing and shipping at Port Elizabeth in 1870 remained as hazardous as it had been in 1820. The attempt to save the breakwater failed and during the 1870s the decision was taken to remove it completely. Thus until the 1930s Port Elizabeth shippers had to be satisfied with the system of jetties which eventually replaced Neate's temporary jetty during the last quarter of the 19th century.

SEPARATISM:
Although the whole issue of demands for port facilities at Port Elizabeth is inextricably entwined with eastern Cape separatism, a detailed analysis of that movement goes beyond the scope of this thesis. Ultimately harbour development merely added fuel to an already kindled separatism fire. Separatism as a movement, despite numerous analyses,[21] remains an enigma:[22]

The eastern separatist movement in the Cape Colony was seldom truly eastern, rarely separatist and almost never a movement.

Without getting too involved in the detailed history of the movement as such, the main features that make it problematical are as follows:[23]
Separatism had many roots: as a term it had many meanings. Clearly the meaning attached to the word varied from time to time, from place to place and even from person to person. The goal varied too. Sometimes the Eastern Province wanted to move the centre of government from Cape Town, sometimes the cry was for a completely separate colony to be established in the East, sometimes the theme was federal devolution of powers, to a resident government. Indeed among the many reasons for the failure of the separatist movement was the inability of the Easterners to agree among themselves about what they were seeking.

Thus separatism meant different things to different people at different times. To most it was merely a means to other ends. Le Cordeur (1981), however, feels that political and military factors played a more important role in its development from 1820-54 than changes in economic conditions. The economic viability of a separate Eastern Province was first raised by J C Chase in 1843. He laid down the position in no uncertain terms when, for example, he motivated a resolution to have the post of lieutenant governor abolished:

Our exports and our trade are the fruit of the development of our industry... and not the produce of foreign countries, which we merely pass like the people of the Cape, to their customers. We are not middlemen. Our foundation is not likely to be shaken by any political commotion or change in European policy... (Cape Town) is hermetically sealed by the sea on two sides, by the Eastern Province on the other, and on the fourth and last, on the Orange River, she is flanked by the impassable Kalliharri (sic) desert. Beyond these limits no article of consumption or export can be obtained. We... on the contrary, have a NOBLE BACK-COUNTRY. We have the fine districts across the Orange to the tropic, whose only port is to be found through our
Province - districts where civilization is rapidly extending... We have the splendid territory of Kafirland... which sooner or later... must become incorporated with the Eastern Province. The fate of the INDEPENDENCE of the Kafir people was sealed that day when the late Lieut. Governor authorised the migration of the Boers across the boundary.

Until then the major motivations for separation were twofold: the need for security on the immediate frontier and the demand for administrative reform by the towns.(27) Both stemmed from the government’s apparent insensitivity to eastern requirements. Thus separatism was born of resentment which largely stemmed from being controlled by an inefficient, indifferent, far-off government in Cape Town. Its origins can be traced back to the 1795 Graaff-Reinet rebellion.(28)

Despite their largely negative nature, by 1854 separatist pressures had gained for the eastern Cape a number of important concessions from the colonial and imperial authorities.(29) The nett result was that when the Cape was eventually granted representative government in 1854, the number of Eastern Province seats in the new parliament was well in excess of its share of voters.[30] Thereafter economic factors began to play a more dominant role in separatism. The booming wool industry had made the eastern Cape midlands complacent and disinterested in the whole issue of separation and the dangers of the frontier. In addition, the eastern Cape Dutch farmers were "definitely aligned in opposition to everything that savoured of the City of Saints".(31) They had come to see separatism as a way of securing Grahamstown/English domination at their expense. Eastern disunity was adequately demonstrated in 1858 when the Port Elizabeth-Grahamstown railway bill was defeated by one vote: "The motion", however, "was lost not by any objections on the part of the West but by the votes of conservative Easterners".(32) But the threat of a wool tax in 1860 brought together the midland and frontier factions. Although their combined effort stopped the tax, to add insult to potential injury, the westerners deviously reintroduced a bill to
raise a £200000 loan for a Table Bay breakwater after several eastern members had already returned home. Thus the original decision to delay the harbour project was reversed and the vote carried.\(33\)

There was an immediate separatist revival and branches of the Eastern Province Separation League were formed all over the region. To overcome prejudice against Grahamstown, Port Elizabeth led the movement because of its wool connection with the midland farmers. The main rallying point was the fact the east was being taxed by a western dominated parliament to pay for western public works – particularly the wool tax, the sale of crown land in the Eastern Province, the £100000 new Houses of Parliament, the £200000 Cape Town breakwater and the £500000 Cape Town-Wellington railway.\(34\) But eastern unity was only superficial and the league's separation bill was defeated in both the 1861 and 1862 sessions of parliament. Thereafter separatism did not "enter the field of working politics" again until 1871.\(35\)

The major reason behind the subsidence of separatism was the onset of the economic depression after the banking and wool boom of the early 1860s. As a result the east adopted a more pragmatic approach which revolved around material gains and economic recovery.\(36\) The fruits of this policy were:

1. a Port Elizabeth-Grahamstown railway bill secured in 1862,\(37\)
2. the completion of the telegraph link to Cape Town in 1864,\(38\)
3. the creation of an eastern districts court with 2 judges in 1864,
4. separate representation for Queenstown in 1865,
5. the government takeover of the Kowie harbour works in 1869,
6. various minor road and bridge projects.

Stead (1974), however, is incorrect to relate Port Elizabeth harbour improvement to pragmatism in the 1860s because the breakwater scheme dated back to 1855. The attempt to extend the scheme in 1866-67 might have been so connected, but, it was never undertaken because the breakwater was rendered useless by silt.
Despite the fact the movement was initially the result of political rather than economic factors, as the east Cape prospered, the latter became more important. Even from the outset it was not purely the need for security that prompted frontier areas to clamour for separation from the west. In Grahamstown particularly, it was:

also the desire of a dynamic group of business leaders for an influence in the formulation of policy which would promote trade and allow them free rein for their vigorous expansionist thrust beyond the colonial borders. This ambition, asserting itself from the earliest days of the settlement, was rampant by the mid-century.

There is only circumstantial evidence to show that separatism was manipulated by its wealthy merchant leaders, consciously or not, to promote their interests at the expense of the small man and farmers, or, for that matter, at the expense of other groups of capitalists. (40) But, increasingly after 1861 the midlands, led by Port Elizabeth, played off the Grahamstown faction against other groups to its own advantage. The growth of the wool trade had diverted Port Elizabeth trade away from Grahamstown to the interior via Graaff-Reinet and Cradock. Prior to the opening of the Zuurberg pass in the 1850s Grahamstown had been the entrepôt, not only to the frontier, but also, the interior. By the 1860s the lack of success of the Kowie harbour works and the development of East London had cut Grahamstown out of the major trade routes. Competition for trade had an important effect on political alliances and the ultimate downfall of separatism as a movement: (41)

The political division between Midland and Frontier rested largely on the economic rivalry and diversity between them... The annexation of Kaffraria...added a third party with different political and economic interests. The rivalry centred primarily over trade routes, railways and harbours. Thus Algoa Bay, the Kowie and later Buffalo mouth vied with one another as well as
with Table Bay for trade... The ambition of Grahamstown to have a port of its own was a constant source of irritation to Port Elizabeth and fostered ill-will between them.

Therefore it is not surprising that separatism never succeeded as a movement - there was too much at stake within the eastern Cape itself. Grahamstown was the first to suffer but in the longer term East London siphoned off Port Elizabeth's Transkeian trade and then increasingly the trade from Albert, Aliwal North, Queenstown and the Orange Free State.(42)

As already mentioned, the lack of harbour facilities at Port Elizabeth merely added fuel to the already kindled separatist fire. In the 1830s and 1840s attempts to improve facilities at Table Bay without similar efforts at Algoa Bay were seen as blatant discrimination. To complicate the issue, the government supported the development of more conveniently sited eastern ports at Port Elizabeth's expense. In turn Grahamstown's support for the Kowie scheme intensified the rift between the two main separatist factions thus undermining the whole movement.

Rivalry between Port Elizabeth and Grahamstown, however, did not undermine Port Elizabeth's bid for harbour improvements. The government supported the Kowie scheme because it was closer to the turbulent frontier. The decision had nothing to do with Grahamstown support. Similarly, the separatist movement neither hindered nor harmed Port Elizabeth's attempts to secure harbour development. An independent Eastern Province government would have promoted improvements at the Kowie and East London just as vigorously as the one in Cape Town. Port Elizabeth's problem was that the presence of harbour works were not vital to her existence as a port. Whereas they were at Table Bay, the Kowie, and East London. Port Elizabeth became the Cape's premier trading port despite the fact there was inadequate harbour development.
PORT ELIZABETH'S ORIGINS AS A PORT:

No attempt was made to use Algoa Bay as a port until the end of the 18th century when the British occupied the Cape for the first time. The bay was named by the Portuguese after the small lagoon at the mouth of the Swartkops River. As late as 1576 the Portuguese merely regarded the bay as a watering place. (43) Up to the mid-18th century there is no record of Dutch ships putting into Algoa Bay. (44) After the 1752 Beutler expedition the Dutch East India Company even abandoned the idea of their ships using Algoa Bay in times of distress because of its exposed position. Thus as late as 1785 local inhabitants reported that they had never seen ships in the Bay. (45)

When the British captured the Cape in 1795, hardly anything was known about Algoa Bay, or Swartkops River Bay as it was sometimes called. In his 1796 analysis John Bruce doubted whether a harbour could be established there. But he stressed its strategic importance, especially against a possible French attack from Mauritius or Réunion. His report, however, was never submitted to the British government. (46)

Renewed unrest in the Graaff-Reinet district during 1797 forced the British to take an interest in this remote bay. The governor, the Earl of Macartney (1797-98), dispatched the secretary to government, John Barrow, to the eastern districts. He had, amongst other things, to report on Algoa Bay's harbour potential and the best way to defend it. He found the most suitable landing place to be on the beach to the north of the Baakens River and seems to have exaggerated the bay's vulnerability to French attack. (47) Simultaneously the navy sent Lieutenant William Rice to survey the coast. (48) He surveyed Algoa Bay during August and September 1797 and reported: (49)

There is no fortification at present nor does any seem necessary except a few Guns planted on the sand Hillocks to oppose an Enemy's landing. The Bay being so extensive...an Enemy's fleet might anchor in shelter...out of Gun Shot from the Shore.
RICE'S MAP OF ALGOA BAY (1797)
The survey resulted in a map showing a curved indentation instead of a bay.[50] This misrepresentation subsequently deterred many ship captains from entering Algoa Bay. Unfortunately, the map was the only one available until a resurvey was ordered in the 1840s.[51]

In 1799 unrest again broke out in the eastern districts. This time it was decided to protect the landing and watering place at Algoa Bay. A wooden blockhouse was built behind the sandhills on the north bank of the Baakens. Subsequently, a stone redoubt, 24 metres square, was built on the steep hill overlooking the Baakens. It was named Fort Frederick after the British commander-in-chief, the Duke of York. Although it possessed no guns, two cannons were placed on the dunes about three kilometres from the roadstead, as Rice had suggested earlier.(52)

Port Elizabeth owes its foundation to the arrival of the 1820 settlers. The beach guarded by Fort Frederick was chosen as the place to land them because it was the only natural landing place on the eastern Cape coast. In the longer term the arrival of the settlers was of utmost economic significance to Port Elizabeth because they were largely responsible for developing eastern Cape commerce and the wool industry. As a result the small garrison at Algoa Bay quickly developed into the Cape's most important trading centre.
FOOTNOTES:

1. GTJ 31/10/1844 p 3
2. The same could be said of all the minor ports between Algoa and Table bays such as Mossel Bay, Port Beaufort and Knysna - they were also cut off from the interior by mountain ranges.
3. G9/1856 p 1 - 1855 PEBH report, Cooper (1928) p 213, Archives Guide (1982) p 208. A contemporary report, however, states that when the old court house burnt down on August 5: "Many valuable papers were saved, and with the exception of some private papers of Mr. L. Lloyd, little of value was destroyed" - EPH 8/8/1854 p 3. Those records that might have survived were still doomed to a fiery end. In 1901 the harbour board destroyed all its old records from 1848-86 - Soonike (undated), note on sources p 2.
4. See appendix on Cory Myth.
5. EPH 7/9/1865 p 3
6. ffolliot (1960) p 158
7. Le Cordeur (1981) p 196. J O Smith was not involved in the spate of east Cape insolencies during the mid-1860s because he returned to England in 1861.
8. See section on Roads in Trade.
9. Landing beach referred to as Markham's cove in the Moresby report (1820) - GG 15/7/1820.
10. See section on Boating Companies in Landing & Shipping.
11. See section on Mfengu and beach labour in Landing & Shipping.
12. See Plans.
13. See section on Lloyd scheme (1845) in Plans.
14. See section on Jamison scheme (1847) in Plans.
15. See section on Pilkington scheme (1849) in Plans.
16. See section on Port Elizabeth Wharf Company (1853-54) in Plans.
17. See section on Port Elizabeth Wharf Company (1853-54) in Plans.
18. See section on Building the breakwater in Construction.
19. See section on Building the breakwater in Construction.
20. See section on Breakwater abandoned in Abandonment.
26. EPH 10/1/1846 p 3
27. Stead (1974) p 30
31. Sole (1939) p 9
32. ibid p 189
34. Stead (1974) pp 47-59, Sole (1939) p 203
35. Stead (1974) pp 67-75
36. ibid pp 77-83
37. The recession saw the PE-Grahamstown railway project delayed until the 1870s.
38. The Port Elizabeth-Grahamstown telegraph was completed in December 1861.
40. ibid p 284
41. Stead (1974) p 107
42. ibid p 110
43. Soonike (undated) p 3
44. ibid p 5
45. ibid pp 8-15
46. ibid pp 15-25: John Bruce, "Sketches of the Political and Commercial History of the Cape of Good Hope...", Jan 1796.
47. ibid pp 25-28, 34 & 36
48. ibid pp 31-33
49. ibid p 36
50. The map based on Rice's survey was published by the Hydrographic Office in 1801 - Chase (1843) p 61.
51. See Plans for details of Algoa Bay resurvey.
52. Soonike (undated) pp 38-45, Theal vol I p 62
2. TRADE
2. TRADE: 1820-70

During the 19th century Port Elizabeth quickly rose to become the Cape's most important trading port at a time that the Cape economy was dominated by the export of wool. Although the wool trade itself was a new phenomenon, the trade in pastoral products had a long history in the eastern Cape.

2.1 EARLY TRADE:
The 18th century Cape economy revolved around supplying colonial produce to passing ships at Cape Town. The major criteria for participation was the distance from this all important market. Beyond certain limits transport conditions rendered arable farming unprofitable. Therefore the only way farmers in the more distant areas could participate was to send livestock and livestock products to Cape Town. Neumark (1957) has dispelled the myth of the self-sufficient trekboer moving away from Cape Town's irritating influence. They always needed necessities such as guns, ammunition, wagons and iron as well as luxuries like coffee, sugar and brandy. To get these items they traded pastoral products such as hides, skins, butter, tallow and soap as well as hunting products like ivory, skins and ostrich feathers. It was obviously cheaper to send an animal to market on the hoof than it was to transport the produce there by wagon. In time the Black tribes were also drawn into the system to a limited extent when they bartered cattle for European merchandise.

The late 1760s saw the beginning of a spectacular increase in foreign shipping calling at Table Bay which lasted for three decades. It is not surprising that the Cape's frontier expanded rapidly eastwards as the economy gravitated towards the cattle wealth and hunting products of the eastern interior. During the 1770s the boundary moved from the Gamtoos River to the Fish River. Thus the already long distance overland to the sole market at Cape Town became even more of a handicap to trade. The only solution was therefore to establish a coasting trade. But the booming Cape Town market was hit by a depression during the 1790s and so a regular Algoa Bay coasting
trade dates from the establishment of a garrison at Algoa Bay during first British occupation of the Cape (1795-1803).

The extent of trade through Algoa Bay before Port Elizabeth received its own collector of customs in 1828 is impossible to ascertain. Apart from military supplies being shipped in regularly to Fort Frederick after 1799, the first export of colonial produce took place at the end of 1812. This involved 250 sheep and 14574 kilograms of butter for the Mauritius market. The following year 2000 casks of salted beef were dispatched to the same destination.[5] Although the export of butter to Mauritius was still flourishing in the early 1820s, that of salt beef did not last beyond 1814 because of inferior quality. (6)

The rise of Algoa Bay trade before 1820 has been largely attributed to a Hollander, Frederick Korsten (1772-1839), who settled there in 1812:(7)

At the period of his arrival, Port Elizabeth consisted of the block-house and a few huts, and so little expectation was then entertained of its importance and present growth, that the deceased was offered by the Government, and refused the gratuitous grant of, sixty morgen of land around the present landing place and site of the town.

According to his biographer, business partner and son-in-law, J C Chase (1795-1877), he soon established a big trading establishment[8] at Algoa Bay with a monopoly of trade in the region.[9] Subsequently branch stores were started at Uitenhage and Grahamstown. He also pioneered the coasting and foreign shipping trade with his fleet of ships and started sealing and whaling operations in Algoa Bay. The extent of his commercial empire, however, has recently been challenged.[10] His 1839 obituary is not quite as glowing in its attributes as Chase was almost 30 years later. But it does state that he became the largest ship owner in the colony. In addition, "he carried on a most extensive and successful trade, and lived to see
the extraordinary progress of a settlement to whose welfare his aid and example in no small degree contributed."[11] It is also mentioned that his whale fishery cost over R$30000 to establish in 1817.[12]

The extent of pre-1820 trade will never accurately be known. It has been estimated that Port Elizabeth exports only amounted to £1500 worth of goods in 1821 while the value of imports is unknown. By 1825 exports had risen to £5200 while imports were £13090.[13] Therefore it does seem probable that, even taking into account Korsten's departure in 1820, exports before 1820 would have been on a similar if not smaller scale. By 1830, however, Port Elizabeth exports had risen to £59301 and imports were £99743.[14] In the same period the number of ships calling in at Algoa Bay increased from 6 to 23 to 50.[15] This growth in trade can be attributed to the growing economic impact of the 1820 settlers. Thus, in real terms, the year 1820 is not only important as the year that Port Elizabeth was founded, but it also marks the beginning of trade on any significant scale.

The settlers had an immediate effect on eastern Cape trade. By 1821 1962 tons of shipping and 200 seamen were engaged in the coastal trade between Port Elizabeth and Table Bay. This excluded warships and the government brig LOCUST which was "almost wholly engaged in carrying up stores for the army on the frontier and government supplies to the settlers".[16]

The settlement of so large a number of colonists on the eastern parts, has had a powerful effect on the coasting trade...and a coasting tonnage, which in common course would have required years, has been created by the circumstances of two seasons.[17]

In June 1821 William Dunn was appointed "Chief Officer of Customs" at Port Elizabeth with a salary of R$1000 a year. Although he accepted the position on August 15, his appointment officially dates from October 1 while damage to the LOCUST delayed his departure from Cape Town to December. On arrival he was given one of the old garrison...
buildings dating back to the 1st British Occupation to operate from temporarily while a customs house was being built.(18) Early in 1822 he was appointed postmaster for an extra R$300 a year.[19] All foreign goods, however, still had to be cleared through Cape Town. Dunn was merely on hand to prevent illicit trade.(20) It would appear that Rivett-Carnac (1961) is incorrect believing that Port Elizabeth trade was stifled until 1826 by double customs dues having to be paid on goods transhipped from Table Bay because no dues on foreign goods were collected at Algoa Bay until direct trade was permitted.(21) Dunn's function before 1826 was merely to ensure that dues had been paid at Cape Town.

By the mid-1820s Port Elizabeth trade had grown sufficiently for the clearing of foreign goods through Cape Town to be found awkward. Thus the government was petitioned to open Algoa Bay to direct foreign trade. The move involved the appointment of a port captain and the creation of a separate customs department. A magistrate would also have to be appointed. Otherwise ship's captains would have to travel 30 kilometres to Uitenhage to declare their documents accurate.(22) Having received a similar request from the Kowie, the governor indicated he was willing to grant licences for particular ships to trade directly through both ports but he was not prepared to grant general permission until the volume of trade warranted the establishment of a full customs department at each port. Magistrates were appointed at both towns and the commandant at Fort Frederick, Captain Francis Evatt, was given this additional duty without an increase in salary.[23] Opening the eastern Cape ports to direct foreign trade was subsequently also recommended by the ongoing commission of enquiry in May 1825.(24)

In time Dunn found it increasingly difficult to prevent ships generally evading foreign trade restrictions. He was even "threatened by a commercial establishment with an action at Law".(25) The problem was eventually overcome in July 1826 when Port Elizabeth was declared open to foreign trade as long as the required dues were paid to the local customs officer. But no advantage was gained over the Kowie because it was given the same privilege.(26)
A year later, as part of the general restructuring of the Cape administration, Port Elizabeth's customs department was upgraded and D.P. Francis was appointed the first collector of customs. (27) When he took up his post on January 1, 1828, he also became the first port captain. [28]

### 2.2 Statistical Problems:

As a result of Port Elizabeth's new status, separate trade figures for the port were published for the first time in the 1829 Cape Blue Book. Unfortunately the data was incomplete and this remained the case until the Cape customs department was taken over by the British Board of Customs in 1834. [29] Prior to that it fell under the Cape government and only goods exported directly were recorded in Port Elizabeth's item-by-item breakdown. To complicate the issue Port Elizabeth trade via Cape Town was included in both port's totals. Thus it is necessary to deduct this amount from both Cape and Cape Town trade to reconcile Blue Book statistics with more modern summaries. [30]

Another complication is the fact that the 1832 Blue Book is missing. Some of the data appears in a summary in the 1834 South African Almanac and Directory but it is not sufficiently detailed to be a complete replacement. Another factor leading to confusion is that the Blue Book customs summaries from 1829-59 include all exports whereas from 1860 onwards they only reflect the export of colonial produce. Most studies do not take this change into account. The Cape's export of colonial produce from 1829-59 has to be calculated from the port item-by-item tables. In Port Elizabeth's case, however, the difference is not significant as on average over 95% of her exports before 1860 were colonial produce anyway.

Because of the first two of these peculiarities, the total value and quantity of each item exported from Port Elizabeth from 1829-33 will never be known. It is obvious, from Table 1, that Port Elizabeth trade during this period was substantially larger than some analysts show. [31] Therefore the growth of Port Elizabeth's export trade in the 1830s was not as meteoric as is usually believed. Instead of
exports doubling between 1829 and 1835 from £15015 (direct) to £33299 (total), they had in fact almost halved from £59301 (total) something which reflects the impact of the 6th Frontier War (1834-35). In fact 1835 exports were almost a third of the peak exports of £87822 in 1832 and at no time until 1840 did exports again approach those of 1829.

During the early 1830s Port Elizabeth was responsible for about a third of Cape exports and a quarter of her imports but these figures plunged to a low of 8% and 7% respectively during 1835. Thereafter they hovered around the 10% level, dropping to 5% and 6% in 1840. The exodus of people during the Great Trek and the 6th Frontier War undoubtedly played their part. But the major reason for Port Elizabeth's relatively poor performance was that Cape trade figures were distorted by an era of massive re-exports during which the proportion of colonial produce to total exports dropped from over 70% in the mid-1830s to an all time low of 22% in 1840. Foreign goods, especially coffee, were transhipped at the Cape and thus "naturalised" to take advantage of lower duties applicable to Cape goods entering Britain. Coffee re-exports reached a peak of 12,7 million kilograms in 1840 but dwindled after coffee duties were altered in 1842. This trade aside, Cape exports of colonial produce during the 1830s remained relatively stable. Port Elizabeth's re-exports peaked in 1841 with £13888 which was equal to 19% of total exports.

2.3 STAPLE EXPORTS:

The 1840s were marked by a steady increase in the wool trade accompanied by the final demise of wine as an important export commodity. Cape wine exports gradually declined from a peak average of 60% of all colonial produce exported in the 1820s to 29% in 1841, the last year it exceeded wool exports. By the end of the 1840s wool exports had almost quadrupled to £199432, while those of wine had almost halved to £41225.[33] In fact:(34)

1849 marks the beginning of a new era in the history of the exports of South Africa. It is then that the rapid growth of the wool industry makes itself felt.
Wool exports leapt from 62% of the colonial produce exported from the Cape in 1850 to 75% by 1860, reaching a peak importance of 82% in 1868. Between 1850 and 1860 the value of wool exports increased by a massive 406% - from £285610 to £1446510 thereafter peaking at £1994054 in 1866. Thanks to wool, in 1865 Cape exports exceeded imports for the first time since 1812.(35) But wool's dominance of the Cape exports was short lived. Already, during its heyday, the stage was set for the next phase with the discovery of diamonds in 1867. Diamonds outstripped wool as the Cape's most important export within a decade.

From 1820-70 Cape exports went through four phases during which combinations of three articles were dominant.(36) The earlier period up to 1840 was dominated by the export of foodstuffs, especially wine. Thereafter the export of agricultural raw materials, notably wool, rose to the fore. In 1822 foodstuffs made up 71% of all colonial produce exported while agricultural raw materials contributed 24%. (37) During 1840, the last year that foodstuffs exceeded raw materials, their contributions were 49% and 42% respectively.(38) Agricultural raw materials reached a peak of 92% of all colonial produce exported during 1868. Meanwhile foodstuff exports had declined to only 5%. (39)

The dominant export articles and their eras of dominance were:[40]

<table>
<thead>
<tr>
<th>Period</th>
<th>Article</th>
<th>Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>1822-28</td>
<td>Wine</td>
<td>54%</td>
</tr>
<tr>
<td>1829-37</td>
<td>Wine</td>
<td>35%</td>
</tr>
<tr>
<td></td>
<td>Hides/Skins</td>
<td>15%</td>
</tr>
<tr>
<td>1838-51</td>
<td>Wool</td>
<td>58%</td>
</tr>
<tr>
<td></td>
<td>Hides/Skins</td>
<td>12%</td>
</tr>
<tr>
<td></td>
<td>Wine</td>
<td>10%</td>
</tr>
<tr>
<td>1852-70</td>
<td>Wool</td>
<td>68%</td>
</tr>
<tr>
<td></td>
<td>Hides/Skins</td>
<td>10%</td>
</tr>
</tbody>
</table>

From the above it is obvious that the dominant Cape export changed from arable to pastoral products. Therefore, Port Elizabeth, as the
entrepot to South Africa's pastoral interior, became the Cape's premier trading port: (41)

AVERAGE ANNUAL SHARE OF CAPE TRADE

(\%)

<table>
<thead>
<tr>
<th>Decade</th>
<th>Exports</th>
<th>Imports</th>
<th>Trade</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PE</td>
<td>CT</td>
<td>PE</td>
</tr>
<tr>
<td>1830-39</td>
<td>15</td>
<td>80</td>
<td>13</td>
</tr>
<tr>
<td>1840-49</td>
<td>25</td>
<td>72</td>
<td>19</td>
</tr>
<tr>
<td>1850-59</td>
<td>53</td>
<td>44</td>
<td>38</td>
</tr>
<tr>
<td>1860-69</td>
<td>70</td>
<td>25</td>
<td>50</td>
</tr>
</tbody>
</table>

Exports grew from being on average a third of total Cape trade in the 1830s and 1840s to become almost a half by the 1860s. Port Elizabeth's exports eclipsed Cape Town's for the first time in 1854 while her total trade did so two years later. But it was not until 1864 that her imports exceeded those of her older rival. Although Port Elizabeth had a trade surplus in both 1834 and 1856, this only regularly became the case during the 1860s when a deficit was only recorded in 1862. Her peak surplus was one of £831629 in 1866. Even Port Elizabeth's peak deficit of £214117 in 1852 was a quarter of that experienced by her erstwhile rival. At no stage from 1829-70 did Cape Town's exports come even close to exceeding her imports. Except for during the 1830s, Port Elizabeth's imports and exports expanded more rapidly than the Cape's did as a whole: (42)

AVERAGE ANNUAL INCREASE

<table>
<thead>
<tr>
<th>Decade</th>
<th>Imports</th>
<th>Exports</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PE</td>
<td>Cape</td>
</tr>
<tr>
<td>1830-39</td>
<td>19%</td>
<td>18%</td>
</tr>
<tr>
<td>1840-49</td>
<td>12%</td>
<td>-2%</td>
</tr>
<tr>
<td>1850-59</td>
<td>25%</td>
<td>14%</td>
</tr>
<tr>
<td>1860-69</td>
<td>1%</td>
<td>-2%</td>
</tr>
</tbody>
</table>

| 1830-69   | 14%     | 7%      | 11%   | 8%    |
Based on data from Table 1, Table 6 and Table 7.
Port Elizabeth's burgeoning trade naturally saw her contribution to Cape customs revenue grow apace:

<table>
<thead>
<tr>
<th>Year</th>
<th>PE</th>
<th>% Cape</th>
</tr>
</thead>
<tbody>
<tr>
<td>1835</td>
<td>£1,370</td>
<td>7%</td>
</tr>
<tr>
<td>1840</td>
<td>£3,954</td>
<td>11%</td>
</tr>
<tr>
<td>1845</td>
<td>£13,544</td>
<td>17%</td>
</tr>
<tr>
<td>1850</td>
<td>£27,294</td>
<td>29%</td>
</tr>
<tr>
<td>1855</td>
<td>£41,374</td>
<td>32%</td>
</tr>
<tr>
<td>1860</td>
<td>£126,408</td>
<td>47%</td>
</tr>
<tr>
<td>1865</td>
<td>£147,339</td>
<td>54%</td>
</tr>
<tr>
<td>1870</td>
<td>£184,337</td>
<td>54%</td>
</tr>
</tbody>
</table>

Simultaneously customs revenue became increasingly important as a source of revenue for the government, rising from 17% of total revenue in 1835 to about half by the 1850s. (44)

Hides dominated Port Elizabeth exports long before wool rose to prominence. They alone made up well over half Port Elizabeth exports up to the mid-1830s. At the time hides and skins were responsible for a quarter of Cape colonial exports. Port Elizabeth hide exports reached a peak value of £32,622 in 1834, a figure which plunged to £12,450 the following year thanks to the 6th Frontier War (1834-35). Thereafter hide exports recovered slowly to reach £26,400 by 1843. The 7th Frontier War (1846-47) saw exports plummet to £4480 in 1848. By 1851 the figure had recovered to £11,089 but the 8th Frontier War (1850-53) soon took its toll and hide exports dropped to £5316 by 1854. They, however, soon recovered and approached the 1834 peak with £30,533 in 1856, the last year that statistics are available.

Although Port Elizabeth's skin exports were never as important as those of hides in the early period, by the 1850s, because of the growing number of sheep in the colony, they were on a par. Both, however, had by then become insignificant in comparison to wool exports. In the 1830s skin exports through Algoa Bay constituted on
average about 15% of colonial exports and a third of Cape skin exports. Exports of the product plummeted during the 6th Frontier War (1834-35) but gradually improved from a quarter of Cape skin exports in the postwar period to eventually reach 52% in 1843. After the War of the Axe (1846-47) the figure fluctuated around a third. The value of Port Elizabeth skin exports reached a peak of £26635 in 1856, the last year that statistics are available. Taken together, hides and skins reached peak importance to Port Elizabeth in 1834 when they made up 66% of her colonial exports. After the 6th Frontier War they declined to a third, a level around which they fluctuated until the early 1840s. Thereafter they dwindled to under 10% by the 1850s.

Port Elizabeth's wool exports increased by leaps and bounds from the first year that statistics are available. Wool exceeded hides and skin exports in 1840 and three years later the value of wool exports alone was more than all other exports through Port Elizabeth. Within ten years wool made up 90% of the Bay's exports, reaching a peak of 95% in 1861 and 1862. The frontier wars had very little effect on wool exports. Although they dropped by 19% in 1848, they picked up by 66% to 1.6 million kilograms in 1849. Similarly, a 15% drop in 1851 was followed by a 61% increase the following year. The million kilogram mark was first surpassed in 1847, five million in 1856 and 10 million in 1863. The recession in the 1860s saw Port Elizabeth wool exports fluctuate around the 13 million kilogram mark after reaching a peak of 14.8 million worth £1,67 million in 1864.

This massive expansion was able to take place because Port Elizabeth was the natural place of export for the Cape's wool producing districts. The eastern Cape's share of the colony's sheep population did not in fact increase. It remained at about two-thirds throughout the period that statistics are available - 1846-65.[45] But the proportion of woolled sheep increased from 41% in 1846 to 96% by 1865 during which time the Western Province's proportion only increased from 56% to 65%. While the number of non-woolly sheep actually increased by 157% in the west, the number in the east decreased by 80%. The number of woolled sheep in the Eastern Province increased almost six-fold to 6.1 million while the number in the Western
Province grew three-fold to 2.2 million. (46)

With the exception of ivory, none of the other colonial goods exported through Port Elizabeth exceeded £10000 in any given year for which Blue Book statistics are available. Ivory exports reached £11486 in 1850, £10558 in 1851 and £12145 in 1853 but plummeted to a mere £1042 by 1856. In turn, only butter managed to constitute more than 10% of Port Elizabeth's exports, and, then only on three occasions: 1837, 1839 and 1841 with 12%, 11% and 12% respectively. (47) Despite Chase's claim of Korsten's flourishing beef exports before 1820, beef and pork exports were insignificant from 1829-56. In addition they were also remarkably erratic: a record low of £193 in 1840 was followed by a record high of £3851 in 1846. Korsten's other pre-1820 flourishing industry, whaling, also proved to be a dwindling enterprise. Whale oil exports declined after a peak of £3944 in 1830. The last recorded export of this product was a mere £57's worth in 1849. The export of seal skins peaked in 1840 with £409 but rapidly dwindled to £60 by 1854, the last year this item was exported from Port Elizabeth. The other more important staple exports before 1856 were aloes, butter, ostrich feathers, horns and tallow. Along with hides and skins, these goods had already reached their heyday as Port Elizabeth's most important exports by 1834. Thereafter the proportion of non-wool staple exports dwindled rapidly: (48)

| Non-Wool Staples's Share of Colonial Produce Exported Through Port Elizabeth |
|-----------------------------|---------|
| 1834 | 93% |
| 1841 | 49% |
| 1844 | 33% |
| 1854 | 9% |

Items not covered by Table 5 averaged only 6% of colonial produce exported from 1829-56. They only made a significant contribution with an average of 16% from 1837-41, the years of massive Cape re-exports. Unfortunately the increase is attributable to "other articles" of
colonial produce exported and are thus not specified. In monetary terms the peak year was 1845, with £18055's worth of "other articles" being exported. Most of this must have been guano. That year Cape guano exports were £45342 or 60% of "other articles".[49]

2.4 PORT ELIZABETH'S RISE:
Port Elizabeth itself expanded rapidly. Initially not necessarily for the better. In 1822 it was reported:[50]

Houses rise up like mushrooms in the night and the building mania pervades all classes, some for comfort, some for necessity, but more for speculation. The consequence is that scarcely one house can be called decent; miserable huts run up without taste or convenience...which gives the Bay much the appearance of a village of the better sort of Hottentots.

But within two years the port was being hailed as "the emporium for the greatest part of the interior".[51] By the time the 1820 settlers celebrated their 20th anniversary Port Elizabeth had 300 houses and a population of 2300.[52] In 1847 it was reported that the town had 20 wholesale establishments, five of which had opened during the previous 12 months - three of these were branches of Cape Town firms. There were also an "unascertained number of large retail stores and smaller shops" and an "adequate number of tradesmen in every line".[53] The Port Elizabeth Bank was opened during the same year. In addition, property prices were booming: "To become a holder of a piece of ground in our rising sea-port is at present more like a mania, than a well-considered speculation".[54] For example, the site of a butcher's shop in High Street, which had been bought for £190 a few years before, sold for £700.[55] As early as 1842 a firm like Mosenthalers had seen the writing on the wall and transferred its headquarters from Cape Town to Port Elizabeth.[56] By 1850 Port Elizabeth's commercial importance had been established:[57]

SIGN OF PROGRESS - It is stated in town that three of the principal mercantile establishments of Graham's Town
contemplate fixing a head-quarters at Port Elizabeth. It is manifest that the seaport at no distant date must be the Commercial capital of the Province.

By 1852 Port Elizabeth's rateable fixed property was valued at £294000 compared to Grahamstown's £200000 and Graaff-Reinet's £100000. Its population had swelled to 5460 (58) and there were £50000's worth of new stores and buildings under construction.(59) The seemingly never ending boom, however, was not based on the soundest of business practices:(60)

As was once said, we believe by the Attorney General, the universal sign-board of the merchants of Port Elizabeth seems to be "unlimited credit here and no questions asked."

This reputation, however, did not deter the first two imperial banks from establishing their Cape head offices at Port Elizabeth during the early 1860s. In fact, the inducement to set up the Standard Bank came from a group of prominent Port Elizabeth merchants led by John Paterson who became its first chairman.(61) The arrival of the imperial banks changed the whole face of Cape banking which was rife with unsound business practices. Thus not even Paterson's former position as chairman prevented the Standard Bank from not giving his firm extended facilities during the recession and he was forced into liquidation in 1866.(62)

Port Elizabeth during the second half of the 19th century was described as:(63)

a place of business - not pleasure. The man who goes to reside there, presuming he goes for the reason which attracts nine hundred and ninety-nine out of every thousand, to get a living, must make up his mind not only to work but to work hard. A drone receives no mercy, be his status in society what it may.
2.5 SHIPPING:
Port Elizabeth's rapidly expanding trade resulted in more and more ships calling at the port. Because of the growing importance of direct wool exports, the proportion of coastwise shipping calling at Algoa Bay actually decreased:[64]

<table>
<thead>
<tr>
<th>Decade</th>
<th>No</th>
<th>Tonnage</th>
<th>Coastwise</th>
</tr>
</thead>
<tbody>
<tr>
<td>1830-39</td>
<td>55</td>
<td>7988</td>
<td>55%</td>
</tr>
<tr>
<td>1840-49</td>
<td>118</td>
<td>20187</td>
<td>45%</td>
</tr>
<tr>
<td>1850-59</td>
<td>196</td>
<td>44367</td>
<td>33%</td>
</tr>
</tbody>
</table>

As a result the average size of ships calling at Port Elizabeth increased from 142 tons in the 1830s to 218 tons by the 1850s. At the same time the average coaster increased from 119 to 155 tons. Although coastwise shipping to all Cape ports actually increased, it remained a relatively unimportant proportion of total shipping.[65] The average size of ships calling at Cape ports remained fairly stable: 291 tons, 271 tons and 292 tons in the 1830s, 1840s and 1850s.

Despite the fact that Port Elizabeth was the Cape's premier trading port by the 1850s, the number of ships calling there never approached the number calling at Cape Town:[66]

<table>
<thead>
<tr>
<th>Decade</th>
<th>No</th>
<th>Tonnage</th>
<th>Coastwise</th>
</tr>
</thead>
<tbody>
<tr>
<td>1830-39</td>
<td>340</td>
<td>106646</td>
<td>6%</td>
</tr>
<tr>
<td>1840-49</td>
<td>548</td>
<td>157310</td>
<td>13%</td>
</tr>
<tr>
<td>1850-59</td>
<td>678</td>
<td>213429</td>
<td>15%</td>
</tr>
</tbody>
</table>
SHARE OF SHIPPING CALLING AT CAPE PORTS
(% by Tonnage)

<table>
<thead>
<tr>
<th>Decade</th>
<th>CT</th>
<th>PE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1830-39</td>
<td>84</td>
<td>6</td>
</tr>
<tr>
<td>1840-49</td>
<td>85</td>
<td>10</td>
</tr>
<tr>
<td>1850-59</td>
<td>75</td>
<td>15</td>
</tr>
</tbody>
</table>

Therefore it is abundantly clear why the Cape government pushed for harbour development at Table Bay. The tonnage of shipping calling at Port Elizabeth might have increased five-fold between the 1830s and the 1850s, but, even then, five-times the tonnage frequented Cape Town.

2.6 INLAND TRANSPORT:
The common denominator between all of Port Elizabeth's major exports was the fact that they were all bulky items, with a relatively low value to mass, produced in the distant interior. Thus their viability as exports depended more on the state of inland transport than on the existence of harbour facilities. Before the advent of railways in the 1870s, eastern Cape transport was dominated by the humble ox wagon. Despite its lumbering appearance and poor local roads, it was able to cope with the massive expansion of trade that took place. The exact number of wagons involved will never be known. But by using wool export data for example, some idea of the magnitude can be obtained. Fully laden, each wagon was capable of carrying about 3000 kilograms of merchandise or 20 bales of wool. [67] Therefore at least the following number of wagon loads on average were needed to transport the annual wool clip to Port Elizabeth:[68]

<table>
<thead>
<tr>
<th>Decade</th>
<th>Wool</th>
<th>Wagon Loads</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(kg)</td>
<td>(no)</td>
</tr>
<tr>
<td>1830-39</td>
<td>43198</td>
<td>19</td>
</tr>
<tr>
<td>1840-49</td>
<td>755443</td>
<td>335</td>
</tr>
<tr>
<td>1850-59</td>
<td>4157657</td>
<td>1848</td>
</tr>
<tr>
<td>1860-69</td>
<td>11934491</td>
<td>5305</td>
</tr>
</tbody>
</table>
WAGONS IN MARKET SQUARE (1859)

Port Elizabeth Public Library
Where figures are available, the number of wagons transporting wool to Port Elizabeth was in fact far in excess of the above estimates. In 1854 it was reported that 4000 wagons entered Port Elizabeth loaded with wool during the three shearing months.[69] In addition 2000 wagons with other goods arrived at the town.[70] During 1856 wagons were using the Sunday's River punt at the rate of almost 1000 a month.[71] Four years later 1200 wagons a month used the Rawson bridge across the Swartkops River outside Port Elizabeth.[72]

The wagons travelled painfully slowly. The almost 500 kilometre round trip from Graaff-Reinet to Port Elizabeth and back took two months.[73] It has been estimated that the average wagon travelled 193 kilometres to get to Port Elizabeth.[74] Thus most wagons entering the town had been on the road for almost a month. Therefore the sheer number of wagons, let alone oxen,[75] involved in eastern Cape trade must have been enormous.

As eastern Cape trade expanded, more and more wagons were required. The resultant competition between wagoneers forced down transport costs. All the same, wagons were still sometimes "not to be had at any price".[76] Between 1851 and 1870 wagon transport costs from Port Elizabeth dropped by an average of 75% to most destinations.[77] The rate to Graaff-Reinet dropped from 5s per 45 kg [78] to 3s while those to Bloemfontein dropped from 40s to 11s. The busiest route, that to Grahamstown, was obviously most competitive. Thus the rate quickly stabilised at about 2s after being as high as 6s.

By the mid-1850s transport costs between Grahamstown and Port Elizabeth amounted to £85000 a year.[79] Each wagon earned about £15 per round trip,[80] so over 2800 wagon trips were involved. Similarly, transport costs between Port Elizabeth and Graaff-Reinet were £71000 a year.[81] Thus a round trip cost £30,[82] which meant at least 2300 wagon trips were involved. Because each wagon took two months to do a round trip, each could do a maximum of six trips a year. Therefore at least 380 wagons were permanently transporting goods between the two towns. The greater the distance, the higher transport costs were in relation to the value of the goods being
carried:[83]

TRANSPORT COSTS TO PORT ELIZABETH AS A PROPORTION
OF A £324 WAGON LOAD OF WOOL
DURING 1857

<table>
<thead>
<tr>
<th>From</th>
<th>Rate</th>
<th>Cost</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grahamstown</td>
<td>3s</td>
<td>£7</td>
<td>2</td>
</tr>
<tr>
<td>Graaff-Reinet</td>
<td>6s</td>
<td>£15</td>
<td>5</td>
</tr>
<tr>
<td>Bloemfontein</td>
<td>18s</td>
<td>£45</td>
<td>14</td>
</tr>
</tbody>
</table>

The Graaff-Reinet proportion would have been about average. The proportion dropped in sympathy with declining transport costs during the 1860s.[84]

In season wool was obviously the dominant cargo. Therefore the bulk of wagon traffic was from the major wool growing regions to Port Elizabeth. In 1853 the districts of origin of the wool exported through Algoa Bay were:[85]

<table>
<thead>
<tr>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graaff-Reinet 27</td>
</tr>
<tr>
<td>Somerset      15</td>
</tr>
<tr>
<td>Colesberg     13</td>
</tr>
<tr>
<td>OFS           11</td>
</tr>
<tr>
<td>Uitenhage     8</td>
</tr>
<tr>
<td>Other         26</td>
</tr>
</tbody>
</table>

In addition to the Graaff-Reinet district being the eastern Cape's major wool producer, a large proportion of Orange Free State and Colesberg wool had to pass through the district to get to Algoa Bay. Even Beaufort West, closer to Table Bay, sent its wool to Algoa Bay via Graaff-Reinet. In fact over half Port Elizabeth's wool exports came via the Graaff-Reinet and Cradock roads. Most of the remainder came via Grahamstown.[86]
Port Elizabeth owed its importance to the fact that it was the natural outlet to the sea for the major wool producing districts. She maintained her position so long as inland transport depended on the ox wagon.

2.7 ROADS:
The state of the road system was more important to the rise of Port Elizabeth as the Cape's most important trading port than the existence of any harbour facilities. Taking into account the importance and sheer magnitude of the wool trade, it is therefore not surprising that the government's first serious attempt to improve eastern Cape roads involved upgrading the Port Elizabeth-Grahamstown road and a link to the interior via the Zuurberg Pass.

Until the 1840s, the government did precious little to keep eastern Cape roads in good repair apart from setting up tolls, such as the one at Port Elizabeth, to theoretically finance local maintenance. The collected money, however, rarely went towards road repairs.(87) In the early 1830s eastern Cape roads were so bad that it was even suggested that camels be introduced to overcome them.(88) The roads were in fact only deep wagon tracks. When parts became very bad, that section was bypassed and a parallel track developed. In theory the owner of the land over which a main road ran was responsible for its maintenance. Thus occasionally ruts were filled by local farmers with available loose material. But the sheer volume of traffic over the most important roads made adequate maintenance an impossibility. The road from Grahamstown to Port Elizabeth was the most used and therefore most in need of repair. Already by the 1830s the part nearest the port was used by up to 12000 wagons a year.(89)

The major reason for the "execrable condition" of Cape roads was the colony's general lack of funds.(90) Therefore, as was the case with local harbour development, it was left to private enterprise to take the initiative. Grahamstown residents, for example, subscribed funds for a new road through Howison's Poort in the early 1830s.(91) But this kind of venture was always undercapitalised and the roads involved usually little better than the rest.(92) Other improvements
were limited to privately operated punts at the major rivers and numerous inns to accommodate weary travellers.

By the late 1830s the increased military presence on the frontier saw the army take an interest in road construction. For example the Queen's road was started between Grahamstown and Fort Brown. (93) But this did little towards solving the overall problem. Locally it was realised that roads were ultimately "the Roots, out of which cities grow": (94)

Roads improve the country, but they create the Town.
Take away Roads and the farmer becomes a skin-clad, bakerless, sofaless barbarian or a naked, chairless savage; but the manufacturer, artist, merchant, expires, perishes, evaporates. He has lost the primary conditions of his existence; the two-legged featherless animal of the fields has lost the secondary only.

In 1838 the newly appointed governor, Sir George Napier (1838-44), although he eventually became unpopular in the eastern Cape, immediately attempted to have the Port Elizabeth-Grahamstown road improved. But an impoverished treasury ensured that his recommendations were never carried out. (95) The late 1830s also saw the government engineer, Major C C Michell, revive interest in a general colonial road scheme that would serve civil, military and commercial interests. But permission to start by opening important mountain passes was rejected by the colonial secretary as being extravagant. (96) Despite the rejection of Michell's scheme, Napier continued the campaign for better roads. Arguments in favour of road boards were built into his appeal for representative government in 1841. (97) Ironically, Lord Stanley used the fact that the northern and eastern parts of the colony were so "inaccessible" from Cape Town as a reason for refusing to grant the Cape a representative assembly. (98)

During the 1840s three factors combined to bring the eastern Cape roads issue to a head. (99) Firstly, the rapidly expanding wool trade brought new prosperity to the region. Secondly, immigration
introduced new ideas and incentives and more than compensated for the losses of 1836-38. Finally the continued disturbed state of the frontier awakened official and public opinion to the necessity of good roads. Despite the various earlier attempts, it "was not until the end of 1843, that the schemes entertained by Michell, Napier and Porter, found, in the master mind of John Montagu, convincing formulation and support". (100)

The result was Montagu's central road board, supported by a series of local boards, which used the colony's convicts exclusively for main road construction. Unfortunately, the board's prime consideration was the improvement of communications between Cape Town and the frontier. Thus all its roads led to Cape Town, much to the frustration of the Eastern Province which naturally wanted Port Elizabeth as the hub of the road network. (101) The whole road question thus added fuel to the separatism fire. The following graphically summarises east Cape sentiments: (102)

**DIRECTIONS FOR ROAD MAKING**

Take a large quantity of fine pulverised dust, with about an equal quantity of water, and mix them well up together till they have the consistency of a thin paste, then choose an unequal piece of ground, taking care that the holes may be plentiful in it and of uncertain depth, pour the mixture over the ground and add a little more water, and you have "a dainty dish to set before the King" - you have an exact specimen of Her Majesty's Post Road between two of the principal towns in the Eastern Province, and over which there is more traffic than any other Road in the Colony, vide the Adow Bush!! The only sauce that is wanting for the Pudding, is to get the Central Board all cram'd into the Omnibus, secure the door, and let them be driven by PUNCH.

In 1847 the cudgels against the board were taken up by the newly arrived lieutenant governor, Sir Henry Young (1847), who was an
ardent separatist. Within two days of being "bumped with his sister from the port to the seat of his government in Grahamstown", he reported the disadvantageous effect of Montagu's road system on the Eastern Province. (103) His suggestions, however, were rejected by the executive council because Montagu's system was to be given a 7-8 year trial. (104)

It has been shown that the western dominance of Montagu's road system has been grossly exaggerated. (105) In fact, the eastern districts got 25% more from board funds than it was entitled to between 1844 and 1855. (106) Road building in the Eastern Province under the Montagu system was held up for reasons other than western spite. The board's attempt to start road work in the eastern Cape in earnest in 1846 was soon interrupted by the outbreak of War of the Axe (1846-47). All work was suspended until eventually in 1848 250 convicts were placed on the Zuurberg Pass project which was given priority because it would enable Port Elizabeth bound traffic from Cradock and Colesberg to avoid the circuitous route via Grahamstown. Both a more direct Port Elizabeth-Grahamstown road and the Zuurberg Pass were completed in 1850. But the 8th Frontier War (1850-53) prevented any further large scale road work in the eastern Cape, except near Port Elizabeth. (107)

When work on the Zuurberg road recommenced after the war in December 1853, it was found that the pass had deteriorated to such an extent that it had to be virtually rebuilt at an estimated cost of £28000. (108) The opening of the Zuurberg Pass was the turning point which eventually saw the decline of Grahamstown as an important commercial centre. From the 1850s the majority of inland trade bypassed Grahamstown and went directly to Port Elizabeth.

The Zuurberg road was hailed as the "Land Mississippi for our extensive back country" and "the road of roads". (109) Although the road was completed from Commando Kraal to within a kilometre of the top of the Port Elizabeth side of the pass by the end of 1849, (110) a decade later it was only open to where the Cookhouse drift road intersected the old military road to the Orange River. (111)
COST OF MAJOR EAST CAPE ROADS 1843-59 (112)

<table>
<thead>
<tr>
<th>Road</th>
<th>Cost (£)</th>
<th>% Convict</th>
<th>Labour</th>
</tr>
</thead>
<tbody>
<tr>
<td>Howison’s Poort</td>
<td>28702</td>
<td>51</td>
<td></td>
</tr>
<tr>
<td>PE-Grahamstown</td>
<td>25884</td>
<td>65</td>
<td></td>
</tr>
<tr>
<td>Zuurberg Pass</td>
<td>52993</td>
<td>79</td>
<td></td>
</tr>
<tr>
<td>to Cookhouse</td>
<td>1792</td>
<td></td>
<td></td>
</tr>
<tr>
<td>southern slopes</td>
<td>3041</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>112593</td>
<td>65</td>
<td></td>
</tr>
</tbody>
</table>

By the time the divisional councils were made responsible for maintaining government built main roads in 1864,(113) the eastern Cape had a fairly well developed main road network.[114]

Although there were a number of moves to promote railway construction in the eastern Cape during the 1850s and 1860s, nothing came of them until after 1870. The Cape government might have been tardy about promoting Port Elizabeth harbour development but it did what it could about a more important link in the trading chain that tied the most isolated Karoo wool farm with the British textile industry. The existing system of shipping goods was able to cope with the massive expansion of the wool trade. The major problem was to transport the wool by ox wagon from the interior to the port. Thus the opening of the Zuurberg Pass was far more beneficial to the wool trade than any similar expenditure on harbour facilities could ever have been. In turn Port Elizabeth’s prosperity and dominance of Cape trade depended on the wool trade and not on the development of her harbour. Ships did not call at Port Elizabeth because of her facilities but because of her wool.
CAPE ROADS (1864)

Adapted from Breitenbach (1958) p 248
FOOTNOTES:

1. Neumark (1957) pp 3-5 ff
2. ibid p 53
3. ibid p 137
4. ibid p 56
5. Cory vol I p 285. In the tender it was specified that each barrel should contain 42 pieces of beef each weighing 3.62 kg - Müller (1983) p 2.
7. GTJ 27/6/1839 p 3 - Korsten's obituary
8. Korsten's establishment was at Cradock Town, today the site of the suburb of Algoa Park.
10. See Müller (1983)
11. GTJ 27/6/1839 p 3
12. R$30000 = £2250 even at the devalued 1825 exchange rate.
13. Chase (1843) pp 201 & 203. His statistics were also published in GTJ 12/11/1840 p 2.
14. See Table 1.
15. The tonnage of shipping calling at Port Elizabeth increased from 1000 (1821) to 1870 (1825) to 7306 (1830) - GTJ 12/11/1840 p 2.
16. Bird (1823) p 122
17. ibid p 121
19. Dunn was appointed PE postmaster from 29/1/1822: RCC vol XIX p 55 - 1824 civil establishment, Morse Jones (1971) p 110.
20. Bird (1823) p 121
22. CO 235 No 24 1/3/1825 - Ward to govt sec: refers to memorial
23. RCC vol XX 31/3/1825 p 402 - govt to colonial secretary. According to Cory, Port Elizabeth temporarily became a Uitenhage subdistrict until 1828 when it became a full magistracy under Hougham Hudson - Cory vol II p 207.
24. RCC vol XXI p 326 - 25/5/1825 commissioners of enquiry report to colonial secretary
25. CO 284 No 38 23/5/1826 - Dunn to lt gov
26. RCC vol XXVII p 154 - 26/7/1826 govt minute, Cory vol IV p 208
27. RCC vol XXXII pp 16 & 31 - 14/6/1827 Hay to Francis, 16/6/1827 Francis to Hay; Morse Jones (1971) p 116
28. Francis held the dual positions of Port Elizabeth collector of customs and port captain until Edward Wallace was appointed the first harbour master in September 1831. Francis retired from the Port Elizabeth customs department on June 7, 1853, after just over 25 years service - BB (1853) p 172.
30. For example: BB (1829) gives total Cape exports as £348459 but if Port Elizabeth's exports via Cape Town of £44286 are deducted, the £304173 of later summaries is obtained - viz Union Yearbook (1917) and BB (1909) - in this specific case the £1 difference is attributable to rounding off.
31. An example of the under-estimation of Port Elizabeth trade from 1829-33 is Rush (1974) who merely gives direct trade and shipping in Table X (p 37). Thus for 1829 he records:

<table>
<thead>
<tr>
<th>Ships</th>
<th>Tons</th>
<th>Imports</th>
<th>Exports</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>4274</td>
<td>£6773</td>
<td>£15015</td>
</tr>
</tbody>
</table>

Instead of:

<table>
<thead>
<tr>
<th>Ships</th>
<th>Tons</th>
<th>Imports</th>
<th>Exports</th>
</tr>
</thead>
<tbody>
<tr>
<td>41</td>
<td>4274</td>
<td>£63491</td>
<td>£59301</td>
</tr>
</tbody>
</table>

For some reason total shipping tonnage is included instead of the actual 1123 tons recorded for the 5 ships (direct) that were registered inwards.

32. Bock (1930) pp 27-28

33. ibid pp 67-69. Bock attributes the decline of the Cape wine industry to:
   1. The loss of a European market as a result of changed tastes and poor quality.
   2. The emancipation of the slaves.
   3. The loss of preferential British duties.
   4. Disease.

34. ibid p 31
35. ibid
36. See Bock (1930) p 93
37. ibid p 86
38. ibid p 87
39. ibid p 88
40. ibid p 93 - proportions are for the last year of each period.
41. Calculated from Table 1.
42. Calculated from Table 4.
43. Calculated from Table 9. Most of the Cape's customs revenue came from duties, rising from 85% in 1835 to all but 100% by the late 1850s. In turn virtually all Port Elizabeth customs revenue was derived from customs duties. Insignificant amounts came from fees and rents. Although at Cape Town wharfage dues made up about 8% of customs revenue, they were never levied by the customs department at Port Elizabeth. The harbour board did, however, introduce a wharfage fee in 1858 to finance breakwater construction.

44. See Table 9.
45. BBs have no annual woolled sheep breakdown before 1846. From 1855 there are only figures every ten-year census.
46. See Table 8.
47. Products like beef and pork, tallow, butter and whale oil all exceeded 10% at times between 1829 and 1833 but this proportion refers to direct exports only and not all colonial produce exported from Port Elizabeth.
48. Calculated from Table 5.
49. 1845 is the only year an item, guano, was specified under "other articles" - BB (1845): Customs (No. 7).
52. Figures quoted by J C Chase during a speech when the 1st jetty's foundation stone was laid - GTJ 30/4/1840 p 2-3.
53. EPH 23/1/1847 p 2
54. EPH 3/7/1847 p 2
55. EPH 24/4/1847 p 2
56. House of Mosenthal (1939) p 21
57. EPH 29/6/1850 p 4 - Praeconia. This was the last EP Herald published until the EP News changed its name to EP Herald at the beginning of 1854.

58. EPN 24/4/1852 p 2

59. EPN 13/7/1852 p 2

60. EPH 13/2/1856 p 2

61. ffolliot (1960) pp 139-42

62. ffolliot (1960) p 142

63. Noble (1875) p 174

64. Calculated from Table 10 - BB port-by-port shipping data was discontinued after 1860.

65. The average annual proportion of coastwise to total Cape shipping increased from 9% (1830s) to 16% (1840s) to 18% (1850s).

66. Calculated from Table 10.

67. In the 1850s the load a wagon carried varied from 5000 lbs (2268 kg) to 7000 lbs (3175 kg). There were 7 bales of wool to a ton (1016 kg) - SCR (1858) pp 38, 82 & 103.

68. The calculation is: average wool exports for 10 years from Table 6 divided by 3000 kg per wagon multiplied by 75%. It is doubtful that the wagons would have been fully laden. 75% of a full load has been taken because in 1861 Joseph Mosenthal made calculations based on 15 bales per wagon to prove that eight camels were four times as efficient as a span of 14 oxen - EPH 29/3/1861 p 2.

69. Using the formula to calculate the above table, at least 1322 wagons would have been necessary to bring that quantity of wool to Port Elizabeth in 1854 - in reality 4000 were used.

70. EPH 21/11/1854 p 2

71. SCR (1858) p 50

72. EPH 4/5/1860 p 4


74. EPH 21/11/1854 p 2

75. There were 14 oxen to a span - Joseph Mosenthal's estimate - EPH 29/3/1861 p 2. See footnote 68.

76. EPH 26/1/1858 p 4

77. Calculated from Table 11.

78. 45kg = 100lb

79. SCR (1858) p 50

80. The calculation is: 3000kg per wagon divided by 45kg per 3s charged multiplied by 75%.

81. SCR (1858) p 101

82. The rate to Graaff-Reinet was 6s per 45kg.

83. Based on Table 11. The calculation for the value of a load of wool is: 3000kg per wagon multiplied by 75% multiplied by (value of 1857 PE wool exports divided by mass). The calculation for transport costs is: 3000kg per wagon multiplied by 75% divided by 45kg multiplied by rate per 45kg. It has been presumed the transport rate would have been the same as from Port Elizabeth to the various destinations.
84. The decline in transport costs was, in fact, counteracted by a decline in the value per kilogram of wool exports. So the proportion of transport costs to the value of a load of wool from Graaff-Reinet, for example, dropped less than freight rates themselves:

<table>
<thead>
<tr>
<th>Year</th>
<th>Value of Load (45kg)</th>
<th>Freight Rate of Load</th>
<th>Freight Cost of Load of Value</th>
<th>Freight as %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1857</td>
<td>£324</td>
<td>6s</td>
<td>£15</td>
<td>5%</td>
</tr>
<tr>
<td>1864</td>
<td>£252</td>
<td>4s</td>
<td>£10</td>
<td>4%</td>
</tr>
<tr>
<td>1870</td>
<td>£223</td>
<td>3s</td>
<td>£7</td>
<td>3%</td>
</tr>
</tbody>
</table>

% change 1857-70 -31% -50% -53% -40%

85. Calculated from data based on Blancheton's figures showing the quantities of wool produced by each division of the colony in his Vade Mecum for the Cape produced for the French Universal Exhibition of 1855 - SCR (1858) p 34.

86. According to calculations based on Blancheton's data, about 55% of Port Elizabeth's wool trade would come via Graaff-Reinet if it had a railway - SCR (1858) p 34. Figures put forward by rival Grahamstown railway promoters complement this proportion - they calculated 45% of Port Elizabeth's wool exports went via Grahamstown - appendix p 128 - SCR (1858). In addition the two sets of data agree that only about a third of Free State and a quarter of Colesberg wool went to Port Elizabeth via Grahamstown, the rest going via Graaff-Reinet or Cradock.

88. GTJ 24/2/1832 pp 35-36 - letter from "Yusef Wolid Alee"
89. Cory vol IV pp 237-38
90. GTJ 3/12/1835 p 2 - editorial
92. GTJ 3/9/1840 p 2 - letter from "A Farmer"
93. GTJ 28/9/1839 p 2 - editorial
94. GTJ 1/2/1838 p 2
95. Cory vol IV p 243
96. Breitenbach (1958) p 231
97. ibid
98. Fryer (1959) p 5
99. Breitenbach (1958) p 231
100. ibid p 232
101. ibid pp 235-39
102. EPH 23/7/1845 p 3
103. Le Cordeur (1981) p 171. See also Copy of Minutes...on...Public Roads (unnumbered 1854).
104. Le Cordeur (1981) pp 172-75
106. Taylor (1938) pp 46-47
110. EPH 26/1/1850 p 3 - Praeconia
111. EPH 24/5/1859 p 1 - official notice
112. EPH 15/7/1859 p 2
113. SESA vol 9 p 372
114. See map of Cape roads (1864). It should be noted that the maps of roads constructed by the central road board 1843-53 in Breitenbach (1958), p 248, and Le Cordeur (1981), p 133, are both incorrect. They show the Zuurberg road going via Graaff-Reinet to Colesberg. Firstly, the Zuurberg Pass was on the Port Elizabeth to Cradock road. The Zuurberg mountains indicated on the maps have nothing to do with the Zuurberg road which is named after the range of mountains along the southern border of the Somerset East district - SESA vol 11 p 608. Secondly, the road was only completed as far as the Somerset East district by 1855 - G28/1856 p 6 - inspector of roads report 24/7/1855. The intention was, however, to extend it to the Orange River. North of Cradock it would branch into two - one via Colesberg to Botha's Drift and the other via Burgersdorp to Aliwal North. The Port Elizabeth to Colesberg road via Graaff-Reinet was still only a recommendation by 1855 - G28/1856 p 9 - central road report 5/7/1853, G9/1855 p 4. Actual construction on the Uitenhage to Graaff-Reinet section began in October 1857 - GG 12/3/1858 - 1857 central road board report, paragraph 15.
3. LANDING AND SHIPPING
The actual method of landing and shipping goods from the open beach at Port Elizabeth remained virtually unchanged between 1820 and 1870. Everything had to be loaded into surfboats which had to negotiate Algoa Bay's notorious breakers. The surfboats were propelled between the roadstead and the shore by means of a system of warps or ropes. The cargoes were manhandled into or out of the beached boats by labourers who, depending on the state of the tide, had to wade through the shallows. The artist Thomas Baines best describes the operation:

These surf-boats were large and strongly built; their bows were broad and well formed, but their sterns seemed barely three feet in width, and from the upward slope of the bottom, to facilitate their running on the beach, not much more than half that depth; and a crowd of Fingoes (sic), dressed in a piece of sack or gunny bag sufficiently large to protect their shoulders from the sharp edges of their burdens and decorated with beads, brass rings, and native amulets, were filling them with ox horns. As each boat completed her cargo six or eight fellows jumped on board, and laying hold of the line which led between the 'horns' of her stern and stern post, began to haul her out, the spray flying from her broad bows in a dazzling mist to the height of more than twenty feet as each successive breaker dashed against her, and forming so beautiful a picture that I could not resist the temptation to add it on the spot to my other sketches.

The process was extremely arduous and labour intensive. Therefore it is not surprising that labourers prepared to do the work soon realised their bargaining power and pushed up their already relatively high wages. As a result their employers attempted to outmanoeuvre them by calling for harbour improvements that would make landing and shipping less dependent on them.
BAINES SKETCH OF DWARF JETTY AND SURFBOAT (1848)

Africana Museum, Butler (1974) p 316

MFENGU BEACH LABOURERS (1850s)

Port Elizabeth Public Library, Cooper (1930) p 336
The massive increase in Port Elizabeth's imports and exports during the half century under consideration saw the landing and shipping operation go through three distinct phases. Initially the work was carried out by government boatmen who eventually gave way to private individuals. Finally in the 1840s boating companies were set up to cope with the huge increase in demand. The work of the companies was largely guaranteed because their shares were owned by the various merchants. But in the long term this fact made the system very inefficient. Instead of one boating company handling a ship's entire cargo, each importer or exporter gave his business to the boating company in which he held shares. Thus time and effort was wasted while ship's holds were searched for specific items. In addition, while one boating company's boats were overworked, another's could be standing by idle because their clients did not happen to have anything to be handled. The problem was eventually overcome by the amalgamation of the boating companies into one company which was ultimately taken over by the harbour board itself.

3.1 GOVERNMENT BOATMEN: 1820s
A surfboat was first stationed at Algoa Bay in August 1800. It was requisitioned from the Table Bay port department to handle government and military supplies.(4) By the time the Cape was handed over to the Batavian Republic in 1803, the surfboat was found to be inadequate. Thus the matter was taken up by the governor, Lieutenant General J W Janssens (1803-06). He approved of the suggestion that a second surfboat be built and block, tackle and warps be obtained to haul the boats ashore. At the same time troops stationed at Fort Frederick were assigned to assist the boatmen when necessary.(5) The return of the Cape to the British in 1806 might have seen a change of personnel but there was little alteration to the status quo at Algoa Bay. In fact the method of handling goods at Port Elizabeth did not change until the construction of jetties in the 1870s.

After the arrival of the 1820 settlers increased the traffic in government stores, the number of government boatmen stationed at Port Elizabeth was increased from four to five in 1822.(6) Assisted by soldiers from Fort Frederick, they had a whale boat and two or three
surf boats at their disposal. While not occupied with official work, the boatmen were permitted to handle private cargoes. Their charge was R$4 per ton.(7)

In 1825 there was an attempt to privatise the Port Elizabeth boating establishment. Captain J Ward requested that he be allowed to take it over.[8] In addition to being able to reduce the charge to R$2 4 skillings a ton, Ward pointed out he would save the government the R$5000 a year necessary to maintain the boating establishment. His proposal was, however, rejected with the comment:[9]

Monopoly of Govt. is bad enough - but not so bad as the monopoly of Individuals who have nothing but their own Interests to look to.

3.2 BOATING ESTABLISHMENTS: 1828-40

Although there were private boating establishments by 1828, their presence did not improve matters. The inefficiency of the boatmen and beach labourers was given as one of the reasons by the commission of inquiry into Cape trade and harbour facilities why a floating jetty should be built at Port Elizabeth.(10) The problem was one of the first issues brought to the attention of the first port captain, D P Francis (1828-31). After studying the situation, he felt that there was a need for government to regulate the boats landing and shipping merchandise at Port Elizabeth. He found that regular coasters were being given preferential treatment which gave foreign traders "a bad impression of the port".(11) While coasters were cleared in a matter of days, other ships could wait weeks. On top of this:(12)

the men employed on the Beach and in the Boats often refuse to work when Goods can be landed and shipped without Risk or Damage being apprehended from the Surf and at other times the Boats are kept working too long thereby not allowing the Ship sufficient time to clear up and prepare for the coming Storm...
Thus Francis proposed that ships should be discharged and loaded in the order in which they were entered at the customs house. Thereafter no other ships should be handled until the work was completed. In his opinion the basic problem was that:

"we have no competition, the Boats at Port Elizabeth are all in the hands of two persons who are interested in working for Coasters, in preference to strangers..."

Despite this, the government felt: "Matters should remain as they are until competition cures the evil".

The surfboat attached to the commissariat department was operated by the government boatmen when required. The military paid the boatmen 2s a day for services rendered. But during the 1830s increasing traffic in government stores and troops through Port Elizabeth eventually became too much for them. Thus commissariat work was contracted out to the private boat owners. This change saw the commissariat sell off its "very little used" surfboat.

Early in 1838 the old problem of efficiency was raised yet again. There was a complaint that the boatmen only worked when it suited them. Sometimes a boat would go out to a ship but if particular goods were not ready to be unloaded, it would depart leaving the ship idle for the rest of the day. One ship's cargo took 21 days to deliver instead of the three or four days thought necessary. Although bad weather was partly responsible, the delay was owed:

"I may say, chiefly, to those men who work the boats for landing goods, who are three in number, and without whom nothing can be done, as the surf requires boats of peculiar construction. These individuals...only work when they choose, and when they think the weather will permit them to do so for a whole day, - altho' the rate of charge is 6 skillings per ton."
In mid-1840 there was an outcry when all three boating establishments, J O Smith, W B Frames and Mallors & Minter, issued a combined notice stating changed conditions for handling goods. (21) From July the 6s per ton charge no longer included carting goods to and from the beach. Until then the boatmen had delivered the goods to the various stores. Now the merchants would have to find someone else to do this. Thus, in real terms, their cost of landing goods had risen by 1s 6d a ton or 25%. (22) A further charge of 1s 6d a ton was due for storage if the goods were not collected from the beach immediately they were landed.

Combinations, of this kind, are, at all times, to be viewed with an eye of jealousy, and, as a principle, are greatly to be deprecated, - but still, we cannot see anything very unreasonable, when there is such a dearth of labour, that those engaged in this useful employment should enhance, in fair proportion, their rate of charges. (23)

Operating the boats was very labour intensive. For example, 20 men were needed to launch each boat from the beach. At peak times up to 100 men were employed by the boatmen. Because only Mfengu were prepared to do the work, the average wage was high - 3s a day plus overtime. "So independent have these high wages made them, that it is always difficult to obtain their services; and in bad or even cold weather, they object to work at all". (24)

By the early 1840s the whole issue, namely the stranglehold held by both the boatmen and the Mfengu, was seen as a temporary problem for two reasons. Firstly the jetty, which was under construction and had already reached the low water mark, would change the whole method of landing goods. Secondly, in all probability, a company was to be floated, with Port Elizabeth and Grahamstown capital, to land goods. Alternatively, a party of boatmen might be induced to come up from Table Bay to provide the necessary competition. (25)
But there were also unforeseen changes sooner than expected. Almost immediately J T Mallors withdrew from his partnership with T L Minter who continued operating at the prescribed rates. (26) John Whyat undertook to forward and store all goods landed or shipped by Minter's boats for 3s a ton. In addition he made himself responsible for any damage until the goods were handed over to either the boatman or wagoneer. (27)

A year later Frames gave up his boating business so that he could leave Port Elizabeth to live on his farm. He sold up "all the gear necessary to enable any individual to commence the Boating Business immediately - a pursuit which is known to afford one of the best investments of capital in the Eastern Province". (28) This included three large surf boats, a rowing boat and the five-year lease on his beach store "held from the government at a Pepper-corn rent".

3.3 Boating Companies: 1841-70

Port Elizabeth Boating Company: 1841-

The formation of the Port Elizabeth Boating Company in 1841 marks the beginning of an era which lasted until 1901 when the harbour board took over the physical landing and shipping of goods itself. (29) The managing director was D Phillips and the clerk Thomas Yatton. (30) The company was sufficiently profitable to pay a 50% dividend on paid-up capital during 1843. Early the following year an eighth share of the company was put up for sale. (31) Shortly afterwards John Norton's share and interest were also advertised for sale. (32) In January 1846 P & D Haupt put up for auction a "large share" in the PE Boating Company because they were closing down their Port Elizabeth trading establishment. (33)

Eastern Province Boating Company: 1846-

The fate of the existing boating establishments is unknown but there was more than enough work to go around. (34) Towards the end of 1846 the PE Boating Company's dominance was challenged by the announcement that a new boating company for Port Elizabeth was to be formed in Grahamstown. (35) But when the Eastern Province Boating Company actually started operations in 1847 it was largely as a result of
local efforts. It was formed "to overtake that amount of work which the Port Elizabeth Boating Company has not been able to discharge within the DESIRED TIME". (36) The two companies together coped much better. "Great dispatch has been secured in the landing of goods at this port, since the two Boating Companies were formed". (37) Although there were Grahamstown shareholders, both companies were controlled by Port Elizabeth directors. [38]

As had been the case with the boating establishments, the companies usually collaborated. They participated in the 1849 anti-convict agitation by issuing a joint-notice refusing to service ships with convicts on board. (39) The following year both declared themselves not responsible for any loss or damage to goods unless fault could be proved. (40) Much later the PE Boating Company increased its charge for handling wool to 5s 3d a ton at the same time the EP Boating Company reduced its charge to the same amount. [41]

Algoa Bay Mooring and Watering Company: 1850-57

The next development was the formation of the Algoa Bay Mooring and Watering Company in September 1850. It only became operational, however, in April 1851 because of an impure water problem. (42) Rights were secured to a supply of water south of the Baakens and a large reservoir built there. A hulk was also fitted with a supply of anchors and cables. (43) Although the hulk was able to supply equipment, no requests were received during the gale of October 15-16 which wrecked three vessels. (44)

By November the company's waterworks had been inspected by the government engineer, George Pilkington, who was favourably impressed. (45) An iron pipeline ran out beyond the surfline from their reservoir south of the Baakens. Twelve tons of water could be loaded into their waterboat in 30 minutes. This in turn could be pumped into a ship in 40 minutes. (46) The service did "away with the necessity of landing casks". (47a) In October 1851 the company was able to provide HMS RHADAMANTHUS with 27 tons of water. As a result local commentators reckoned that the provision of water was likely to become the port's first permanent facility. "Jetties, mooring
company, projected breakwaters have been, but now are not". (47b) But within days the company had to offer a £10 reward for information leading to the conviction of: (48)

some malicious and ill-disposed person or persons (who) did on the Morning of Sunday last, by using violent means,

Turn the Water-Cock of the "Watering Company's" Tank and let off the whole of the Water from the same; and... on a succeeding Night the same or other evil-disposed persons did shamefully Besmear the whole Boat

The mooring side of the company was soon abandoned. The hulk was offered for sale with all its fittings in November 1851. (49) This was also because Guardian Assurance required proper chains in an open port. (50) Because the company suffered so many unforeseen setbacks in its first year it never really got going. Although a dividend of 30s a share was issued in July 1853, (51) the company was wound up in 1857 and replaced by the Algoa Bay Watering Company.

**Dawson's: 1853-64**

A third boating company had entered the picture by 1853. This was a private one operated by Captain D S Dawson. [52] At about the same time, J H Clarke proposed to extend the PE Boating Company into a "Landing & Storing Co." which would speed up the landing of goods. This was to be done by building a huge store the entire length of Beach Street which would enable wagons to be loaded directly once the goods were landed. It would save on labour because goods would be more efficiently handled. (53) It was felt that the idea would not conflict with the simultaneous attempt to build a wharf south of the Baakens. The landing and storing company could eventually connect its store to the wharf by tramway. (54)
Old Practices:
Meanwhile old practices were dying hard. In 1851, for example, an "Old Boatman" complained that the government boat crew were illegally transporting passengers to ships at anchor. This unfairly deprived legitimate operators of the money.(55) Similarly a Malay boatman was caught stealing goods while they were in transit. Unknown to him he was seen in action through a telescope by the superintendent of the PE Boating Company, Captain G Wilson. Although he was sentenced to a dozen lashes, the punishment was felt to be too light as a three year sentence was felt to be more in order.(56)

The problems arising from the boating companies simultaneously servicing a number of ships for a variety of agents reached a head in 1854 when it was proposed that personal interests should be sacrificed for the benefit of the port as a whole. A meeting held in the Commercial Hall on May 12 failed to find a solution. The problem was that each vessel arriving at Port Elizabeth carried goods for a number of importers who each used the boating company of their choice. Because importers were so closely connected with the boating companies, a resolution, that each ship's agent nominated one boating company to handle all the cargo, failed.(57)

In 1857 there were allegations of malpractice when the commissariat water transport contract was awarded to the PE Boating Company who had not even put in a tender. It had been held by the EP Boating Company which was the only company to tender. Dawson's tender was allegedly never forwarded to Grahamstown. The whole issue arose from a personal grudge by deputy acting commissariat general Smith against the EP Boating Company.(58) The allegations were rejected by his superiors in Grahamstown.(59) The following year there were complaints that senior officials were taking the lion's share of the nominal overtime the boating companies were paying customs officials.(60)

Towards the end of 1857 the EP Boating Company increased its capital base from £2500 to £6000 but only 75 of the new £20 shares were initially issued. The remaining 100 shares were held in reserve. The
opportunity was also taken to remove the 10% dividend limit clause in the company's trust deed.(61)

PE Boating Company dwarf jetty: 1857
The PE Boating Company started building a dwarf jetty off Fleming Street during 1857 in an attempt to make its operation less labour intensive.[62] Before it was even finished it proved useful in saving lives. Ropes were thrown from it to "bobbing heads" from a boat in distress which had been swept towards it by heavy seas.(63) Shortly afterwards, though still incomplete, a crane was erected on it to speed up loading heavy packages.(64) By December 1858 the decision was taken to extend the jetty because of the speed with which surf boats were unloaded there compared to the beach. The EP Boating Company announced it also intended building a jetty at their stores as soon as possible but nothing ever came of this.(65) During the year both companies built new stores which they occupied early in 1859.(66)

Theft:
A major grievance against the boating companies revolved around theft. Liability for goods in transit was largely in dispute until March 1859. But in the case of R L Crump vs the EP Boating Company, the resident magistrate found that the company was liable for five cases of wine delivered short on the beach compared to the number taken off the barque REGINA:(67)

This case, which is of great importance to ship captains, as affecting the liability of the three Boating Companies in landing goods from the various ships..., should induce our Boating Companies to put responsible men in charge of the boats who can give a receipt for the goods delivered into the lighter on account of the Boating Company.

As a result the boating companies required more from their employees. For example, to earn his £12 10s a month, a cargo boat captain was required to, over and above managing loading and unloading, be able
to keep proper accounts. (68) In addition boat captains were made responsible for any cargo on board. This was as a result of the clampdown on security to overcome Algoa Bay's "unenviable notoriety for the number of robberies of cargo which have taken place within the last few years". (69) A number of boatmen were arrested. One of them was "Bones", a PE Boating Company cargo boat coxswain. When his house was searched, a considerable quantity of stolen goods was found. (70) It was also alleged that the boating companies left loaded lighters at anchor unguarded overnight. (71) This was hotly disputed by the boating companies who contended that goods disappeared on board ship rather than while in the boats. Thus the problem was one of falsified documents. (72) It was countered that the problem was that boating company personnel could not keep a proper record of what was loaded and what was not. (73)

To overcome the general shortage of labour, the PE Boating Company employed 19 fishermen and boatmen and four artisans from England on a three-year contract. They arrived on the NEW GREAT BRITAIN in May 1859 along with men brought out by the harbour board. (74) Both boating companies and Dawson charged the same rates: 6s 6d a ton for landing and 6s a ton for shipping, including wool. (75)

Delays:
Another major complaint levelled at the boating companies was not really new. It revolved around ships being delayed through slow handling. For example during the month ended April 26, 1859, each of the three boating companies averaged one boat to each of the four ships being handled every four days. Between the three companies each ship received on average less than one boat a day: (76)

<table>
<thead>
<tr>
<th>Ship</th>
<th>No Days</th>
<th>No Boats</th>
<th>Boats /day</th>
</tr>
</thead>
<tbody>
<tr>
<td>LUISA</td>
<td>23</td>
<td>13</td>
<td>.56</td>
</tr>
<tr>
<td>ISLAND HOME</td>
<td>34</td>
<td>20</td>
<td>.58</td>
</tr>
<tr>
<td>JULIA</td>
<td>22</td>
<td>25</td>
<td>1.14</td>
</tr>
<tr>
<td>MARAVI</td>
<td>34</td>
<td>35</td>
<td>1.03</td>
</tr>
<tr>
<td>Average</td>
<td>28</td>
<td>23</td>
<td>.82</td>
</tr>
</tbody>
</table>
The masters of 13 ships gave the following four reasons for the problem:

1. an altogether insufficient number of lighters;
2. undue preference towards certain vessels;
3. an absence of responsible men in charge of the lighters;
4. each vessel being discharged by a number of companies instead of one.

It was reckoned that a more systematic system would cut down the average handling time from two months to two weeks. Because it was handled by only one company, the SUNSHINE was loaded in seven working days. Other ships, however, were still half discharged after six weeks. The BEN MUICK DHUI arrived from Table Bay with 100 tons of cargo to off load on April 16. Although it was to be handled by all three companies, it had to wait a full week before a lighter was sent out to it. Even then it took only half a cargo. The work that should have taken two days was still incomplete on May 2 when 30 tons of cargo still remained. The passengers had been on board for 32 days. Meanwhile, the American ship GEORGE LEE had two of the largest lighters sent out to it two days after arriving while the GONDOLA had three lighters from the PE Boating Company in one day. In addition a lighter had been removed from the BEN MUICK DHUI to the GONDOLA.[78]

But complaints continued and a call was subsequently made for everyone concerned to dispense with personal jealousies and work towards a better system.(79) A year later the complaints continued unabated. The PE Boating Company was particularly guilty of preferential treatment. A foreign vessel would be assigned up to six boats a day by the company while an English ship would only get one lighter in eight days. The problem was ascribed to private enterprise: "while private interest is allowed to obstruct the public good, this wretched 'system' will be continued".(80) The EP Boating Company was by no means less discriminatory in its business.[81]
TROOPS LANDING THROUGH THE SURF (1856)

Cape Archives (M609), Aldridge (1983) No 158

BREAKWATER AND LIGHTERS (1870)

Port Elizabeth Public Library
Landing passengers:
With the breakwater still incomplete, passengers were landed through the surf: "To the male sex it is inconvenient and unpleasant, to say the least of it; but, to the opposite sex, the act of riding on a man's back is disgusting, indelicate and demoralizing in its tendency". (82) Thus a call was made for a sedan chair to be used with handles that could rest on the men's shoulders. In this way passengers could be carried ashore in dignity and comfort. The danger to passengers was underlined in November when a boat capsized in rough seas. The five crewmen and five of the passengers were saved but a royal engineer, Colonel Rose, was drowned. It was a case of fools rushing in. At the time it was noted: "We cannot close our remarks without again adverting to the imprudence, the madness which actuated the boatmen in putting off on Sunday morning at all." (83)
Although the earlier custom of displaying a black ball at the port office when it was unsafe for passengers to land was no longer practised, the port boat had been sent out to advise passengers not to land. (84) Some had chosen to ignore this because of the willingness of the various passenger boats to take them ashore. As a result of the accident the PE Boating Company ordered a complete set of lifesaving apparatus consisting of a stomach pump and 12 sets of life buoys, belts and lines. Each of its six whale boats were issued with a life-buoy and the rest of the apparatus was made available at its stores. (85)

Algoa Bay Watering Company: 1857-60
The ill-fated Algoa Bay Mooring and Watering Company was wound up in 1857 and replaced by the Algoa Bay Watering Company. It was easier to create a new company than revive the old. (86) Initially, while a stone tank was being built, the company imported fresh water by ship and stored it in a temporary wooden tank for redistribution. (87)

At its second annual general meeting in August 1859, the Algoa Bay Watering Company announced that there was no dividend and it would have to call in a further instalment on its shares to pay the £700 it owed on its new tank boat launched during the year. To date the company had supplied 2238 tons of water. (88) Its charge was 10s per
There were complaints, however, about delays by the company in supplying water. Thus ships transporting horses were forced to carry water from Table Bay. The problem was that the company's tanks only held 100 tons of water while a large ship required up to 300 tons at a time.

Disaster struck in October when the new 15-ton tank boat worth £1500 was blown ashore. It had been unused but was now a right-off. Two of the EP Boating Company's cargo boats were also beached. A law suit, contending that the company had never actually taken delivery of the tank boat failed. This and other problems "placed the company in a position of hopeless bankruptcy". The problem was also partly one of management. It was felt by others that a board of directors was too cumbersome a method of managing a concern with only £2000 in paid-up capital.

At a meeting early in 1860 it was decided to wind up the company on March 1. Tenders were called for the purchase of its equipment. The tank boat was sold for £525 to be used at Port Natal as a cargo boat because it drew very little water. Subsequently one of the largest shareholders, Dr Davies, was compelled by court action to pay his outstanding fourth instalment. As a result 11 shareholders requested that a meeting be held to discuss the company's finances since being wound up. At the meeting it was decided to call in all arrear payments.

New Watering Company: 1860-62
A "New Water Company" was formed after the demise of the first. It also supplied water to vessels at 10s per ton but it too did not last long. Its 27000-litre tank boat, equipment and lease to the spring south of the Baakens were put up for sale in mid-1861. A meeting to decide on how to distribute the company's final balance in the bank was held in March 1862.

Eventually in 1864 the Shark River Water Company (Limited) laid pipes
to the end of the breakwater and called for tenders for the right to transport the water to ships at anchor. (101) In time the harbour board took over this service. [102]

PE and EP Boating Companies: 1860s

The EP Boating Company made up for its 1859 storm losses by launching early in 1860 the largest cargo boat yet stationed at Port Elizabeth. It was named "WMH" after W M Harries who was a director. It was built by W & R Kemsley, 15.2 metres long and could carry a deadweight of up to 30 tons. (103) Not to be outdone, the PE Boating Company's new store was started under the supervision of the harbour board's resident engineer, A G Warren. Covering 836 square metres, it was to be one of the largest in town. (104) In April 1860 the EP Boating Company announced it would stop all except urgent work on Sundays. It was hoped the other companies would follow suit. (105) Soon Dawson completed the largest cargo boat built at Port Elizabeth. It was the EMILY SMITH (Jnr) which could carry 35 tons deadweight. (106)

Algoa Bay's first steam tug, the ALBATROSS, arrived in July 1860. It was owned by a partnership which included Matthew Woodifield. Because of opposition from the boating companies it was sold and sent to Cape Town where it became Table Bay's first tug. (107)

In a resolution passed at the PE Boating Company's 1860 annual general meeting, it was decided to wind up its affairs to provide for an increase of capital. A dividend of £7 10s a share had been declared despite £5000 expenses involved in its new store and various losses. (108) Later in the year it erected a 10-ton iron crane on its jetty. Imported from Glasgow, it was the most powerful in the eastern Cape. (109)

Both the major boating companies maintained the same handling fees. Any adjustment by one would soon be matched by the other. Evidence of this is to be found in 1861 when the PE Boating Company reduced its rate on wool to 4s 6d a ton in July only to be followed by the EP Boating Company in August. Both charged 5s 6d for other cargo but this was reduced to 5s by the EP Boating Company in mid-August only
to be matched by the PE Boating Company a few days later. (110) In November both companies raised shipping charges to 6s per ton and landing to 6s 6d. (111)

At its 1863 annual general meeting the PE Boating Company announced that its gross earnings from handling 50000 tons of cargo for the year ended May 31 were £15213. The gross profit was £3110 which was £507 more than for the previous year. This was 31% on paid-up capital. A dividend of 26% or £6 10s per share was declared after £1114 was deducted for depreciation. The company had increased its beach frontage by acquiring Henry Brown's property for £2000. An iron tramway had been imported and laid from the dwarf jetty to its various stores. (112) During June it set a new Port Elizabeth record by shipping almost 6000 bales of wool. (113) Its shares were currently selling for £50 while those of the EP Boating Company were going for £30. (114)

At its April 1867 year end, the EP Boating Company announced a £4 dividend and a nett profit of £1854. (115) The PE Boating Company reported that it had recovered from the difficulties that had dogged it over the previous three years. It declared a dividend of £2 15s a share after a nett profit for the year of £1563. This was despite writing off £1368 and reducing its liabilities by £1572. (116)

Wheatland & Smith: 1861-65

With business booming in the early 1860s, Wheatland and Smith's boating establishment commenced operations in March 1861. Both men had long beach work experience. Wheatland was the EP Boating company's first superintendent in the 1840s. This operation was eventually taken over to launch the Union Boating Company in 1865. [117]
Algoa Bay Landing & Forwarding Company: 1862-66

The Algoa Bay Landing and Forwarding Company entered the fray in mid-1862. It proposed to operate from the North End bight from where Watts's boats had been operating from for two years. Its initial capital requirements were to be raised by offering 1000 £5 shares: £1 on allotment, £1 in six months and £1 in a year - thereafter shareholders's permission would have to be obtained to call in more.[118] But it soon ran into trouble because it was unable to get government permission to land goods at the bight. At its first annual general meeting in August 1863 it was announced that the Port Elizabeth town council had approached the governor on the company's behalf. In the meanwhile it put the £1000 that had already been raised on fixed deposit at 7%.[119]

In February 1864 its shareholders applied to parliament for a private bill to incorporate the company.[120] But permission to operate from North End was turned down because of the extra expense to the customs department of manning an additional landing place. This was despite the company's offer to provide suitable facilities for customs officers. They were informed that the scheme would not be sanctioned until "very strong evidence is brought forward of the difficulty of landing goods at the usual places".[121]

The company eventually did obtain permission to operate at the bight. But only for bulky goods which were to be landed at the sub-collector's discretion. It was stressed that at all times landing there was to be of a limited nature.[122] Thus in June 1866 a meeting was called to "consider the present position of the Company and to determine whether it shall be continued or otherwise".[123] Its shares were last listed on June 8, 1866.[124]
Algoa Bay Landing & Shipping Company (Limited): 1864-

The Algoa Bay Landing and Shipping Company (Limited) was formed early in 1864.[125] Initially only £9000 of its proposed capital base of £30000 was to be raised by the issue of 3000 shares.[126] There was a provision to raise the amount to £50000 if needed. Only about a third of the shares were made available to the public. The rest were retained by the directors who were linked to the major trading houses who had been Dawson's major customers.[127] They had taken the opportunity to fill the gap created when ill-health forced Dawson to retire. The company took over his premises and equipment for £10000 of which £7500 was to be paid over 10 years at 6% interest.[128] The immediate advantage was that they had immediate use of Dawson's five warehouses, 16 boats, 8 wagons, horses and other equipment on January 27, over a month before the closing date for share applications.[129] As a result it was immediately able to average a profit of about £75 a week.

The company was the first boating company to acquire a steam tug. The 34-ton ST CROIX arrived with much pomp and ceremony in February 1866. She was soon hard at work and able to tow 21 surfboats in and out during one day despite a light southeaster.[130] A year later she went ashore during a southeaster but was undamaged and refloated.[131] During the great gale of 1869 she was again blown ashore and refloated. She was eventually lost when she sunk at her moorings during a storm in 1871.[132]

The Algoa Bay Landing and Shipping Company declared a dividend of 17s a share for 1867 which was 28.5% of the paid-up amount of £3. Its gross earnings for the year were £10605 which yielded a nett profit of £3444.[133]
Union Boating Company: 1865-

The Union Boating Company was launched in 1865. It proposed to raise £40000 in 4000 £10 shares with an initial deposit of £2. But only 1900 shares were made available to the public. It acquired E B Wheatland's working stock as an initial basis for its operation. One of the major motivations behind its creation was the average yield of 22.5% by the three existing companies.[134] One of the PE Boating Company boat captains, James Searle, was appointed the Union Boating Company's first superintendent.[135] The company attempted to advertise its presence by offering to have the municipal wool sales in its store which was still being erected. But the town council declined the offer and decided to build its own shed on a site already purchased for that purpose.[136] At its first annual general meeting, the Union Boating Company was able to announce a dividend of 11% or 6s 6d a share. Its gross earnings up to the end of February 1866 were £5753 which yielded a nett profit of £1754, almost 15% of paid-up capital.[137]

At its 1867 annual general meeting, the Union Boating Company was able to announce an increased dividend of 13s a share or 16.5%. The nett profit was £3316 on gross earnings of £9110.[138] In 1868 the company announced a reduced dividend of 11s a share or 14% because of the issue of 947 additional shares.[139] A gross income of £9544 had yielded a nett profit of £3489 which represented a return of 22% on the paid-up capital of £15708. The press report of the annual general meeting concluded:[140]

In these days of small dividends, large losses, and bad debts, it is refreshing to find that a joint-stock company of this kind can pay its shareholders 14 per cent. on their capital invested, and present such a good statement of affairs.
Eventual Amalgamation:
The silting up of the breakwater in 1867 and subsequent delays in solving the problem eventually forced some of the boating companies to transfer their operations to the South End beach. (141) This state of affairs remained until enough of the breakwater was removed and jetties built in the 1870s. Although the jetties changed the method of handling goods, the beach remained important until as late as the 1880s. (142)

The last quarter of the 19th Century saw a changed role for the boating companies. The days of vested interests by merchants in competing companies resulting in numerous delays to ships, gave way in 1896 to a monopoly with the formation of an amalgamated company, the Associated Boating Company. Under contract to the harbour board, the company was given the sole right to land and ship cargo at Port Elizabeth from September 1, 1896. (143) Ultimately the company's work, plant and equipment were taken over by the harbour board itself on September 1, 1901. It cost £94778 to acquire the company's marine plant. This consisted of 45 lighters with a deadweight of 3000 tons, (144) four steam tugs, all the necessary appliances for handling cargo and the requisite equipment of whale boats, dinghies etc. (145) Thus after 60 years, the era of the boating companies drew to a close.
3.4 THE MFENGU & BEACH LABOUR: 1835-70

Resentment over the total dependence on the Mfengu for beach labour was one of the major forces behind demands for improved landing facilities at Port Elizabeth. High wages coupled with an appreciation of their powerful bargaining position, made the Mfengu very unpopular with local businessmen. The massive expansion of Port Elizabeth trade strengthened the labourers's position even further. Ironically, the breakwater scheme (1855-67) did very little to change the traditional method of landing and shipping goods on the beach. Port Elizabeth's boating companies were only made less reliant on beach labour with the introduction of jetties in the last quarter of the nineteenth century. But by then the power of the Mfengu had already been diluted by competition from other tribes.

Specialist beach labourers did not exist at the time the 1820 settlers landed. They were helped ashore by Scots soldiers of the 72nd Regiment then stationed at Fort Frederick. Butler (1974), however, does mention settlers being "carried ashore on the backs of...strange black men".[146] Other writers and the settlers themselves make no mention of black beach labourers.[147] As this would have been the settlers first contact with black people, most would have commented on it. In fact they only mention the soldiers. The only Khoikhoi around were wagon drivers. The Reverend John Ayliff specifically mentions that there was only one black at Algoa Bay at the time of the landing. This was a prisoner in transit to Robben Island.[148] His fictional settler, Harry Hastings, noted that "the women were carried out of the surf boats by the soldiers of the 72nd, who assisted at the working of the boats."[149] In addition, the 1828 commission of inquiry report attributed the successful 1820 landing to the skill of the sailors from the MENAI and the soldiers from the local garrison, rather than the bay's natural advantages.[150]

Thereafter as goods shipped through Port Elizabeth steadily increased, Khoi became the chief source of labour for beach work. This situation lasted up to the 6th Frontier War (1834-35).[151] They were paid about 2s a day.[152] After the war the labour force underwent a radical change when the Mfengu were resettled within the
colony. They had sided with the colonial forces against the Xhosa. In 1837 one group was settled as far within the colony as the Tzitzikamma, an area totally unsuited to raising cattle. Starvation soon forced many off their allotted land. (153) As one farmer put it: "It is difficult to say which predominates, our dissatisfaction at their sudden intrusion adding so much to our vagrant population, or their disappointment in the promised land". (154) The problem was even seen as one of the motivations behind the decision by some farmers to participate in the Great Trek. [155]

These circumstances and high wages, as a result of a labour shortage, attracted the Mfengu to Port Elizabeth's beaches. They soon entirely superseded the Khoi who became "regarded as a curiosity" on the beach. (156) In 1840 a beach labourer earned 3s a day, almost as much as an artisan, and double a farm labourer's wages. (157) At the time there were over 600 Mfengu living at Port Elizabeth. (158) When business was brisk up to 100 were employed on the beach. But, it was complained: (159)

So independent have these high wages made them, that it is always difficult to obtain their services; and in bad or even cold weather, they object to work at all. - They are great pilferers; but have one virtue over the Hottentots, whom they have displaced as beachmen - they are sober.

Chase (1843) elaborated on this point: (160)

As savages they are a very intelligent people, extraordinarily attached to money, and temperate or rather sober in their habits. Having hoarded up their wages, they convert them into cattle, and when these accumulate into a sufficient stock, they leave service altogether, to enjoy the fruits of their labour. The possession of this provident and temperate disposition naturally causes them to be much prized by the colonists, so that even where the Hottentots lingered
for a time, they have now been thrust out of the market, for if the services of the Fingos are more expensive in cash wages, their sobriety and industry are more satisfactory and profitable; in a word, there is a dependence upon the Fingo which can never be extended to the Hottentots.

The 7th Frontier War (1846-47) had a disastrous effect on beach labour. Despite a record 25 vessels in the bay during November 1846:(161)

the parties engaged in landing find it almost impossible to bring together sufficient hands for the working of one boat. Many of the Fingoes, who are the men employed in discharging the boats, have left for the frontier in order to obtain a share when the DIVISION of the NEUTRAL TERRITORY TAKES PLACE, while those still remaining behind, but full of the same idea, have become exorbitant in their demands for pay; and on Monday last they struck for an increase of wages.

They were paid 3s 6d for a nine-hour day and 6d an hour overtime.(162) By December 1846 the shortage of labour was so critical that it was even considered requesting the governor for fatigue parties of Mfengu to be sent to Port Elizabeth to clear the arrears and ensure that supplies were forwarded to the troops. A permanent solution could be worked out later. "The beach-parties have been greatly reduced during the war, and the present number of Fingoes at command is not sufficient to work one half the boats".(163)

The return of peace saw the uneasy status quo return to the beach. Everyone, however, had been made painfully aware of the labour problem. Meanwhile wages continued to rise. By mid-1848 it was reported that the authorities intended expelling to Uitenhage any Mfengu refusing to work for 6s a day. The move was obviously aimed at the beach workers.(164)
In October 1848 when the governor mentioned the possibility of having Algoa Bay surveyed for a breakwater, he was reminded that something had to be done in the meantime: (165)

some work for facilitating landing, and diminishing to some sensible extent the enormous expense incurred in the Fingoe labor employed to carry goods from the stranded surf boats to the dry beach.

Two years later when the feasibility of opening the Baakens as a boat harbour was being considered in 1850, the public was reminded that Mfengu beach labour cost about £6000 a year. In addition, urbanisation and westernisation had been taking its toll. "Laterly, through habits of intoxication being very generally contracted by this people, their labor is becoming uncertain and precarious in the extreme". (166)

In June 1852 the Mfengu working for the boating companies struck because the municipality had issued regulations requiring them to work clothed. They submitted the next day after appearing before the magistrate. "The demonstration however we regard as indicative of a coming struggle." (167)

Nudity on the landing beach had always been seen by some as a problem:

I have no quarrel with the Fingoes...for they are a money-making and money-keeping people, and, therefore superior to the Hottentot and other of our native tribes. I respect them for these virtues...but, still, I think, that as WE are forced by the law (to say nothing of innate modesty)...the Fingoes should also be compelled to pay the same attention to the institutions of the civilized society into which they have been thrown. (168)
When Sir Henry Young [169] landed...the first act of his pen was to write an indignant letter to the civil authority of this town, for tolerating the filthy, abominable, and beastly practice of employing black savages in a state of NUDITY as labourers on the beach.(170)

But local entrepreneurs saw high wages as the most important problem. In 1852 Captain E Harrington of the steamer PHOENIX estimated that a jetty would halve the cost of landing goods because of the saving in labour. He had known the labourers to refuse to work on several days when the weather was favourable. His opinion was confirmed by Captain E H Salmond of the harbour board who felt that a jetty would considerably reduce "the enormous outlay for labour, and the complete dependence on the Fingoes". The two boating companies alone paid £7000 a year in "coolie hire". He calculated that a jetty would save about 30%.(171)

By 1853 there were plans afoot to build a private wharf:[172]

All parties know pretty nearly the cost of the present Fingoe labor on the beach. By increased landing facilities by means of a Jetty and other works that labor may be diminished at least to one-half its present amount. But that would be a revenue of £4,000 per annum, or interest of 10 per cent. on an outlay of £40,000.

The prospectus of the Port Elizabeth Wharf Company was published in November 1853. In this document it was stated that a wharf might save most of the annual £3000 Mfengu labour costs.(173) J H Clarke proposed another method of saving on labour costs. He wanted to extend the PE Boating Company into a landing and storing company. By building a large store the whole length of Beach Street, goods would only have to be loaded once, thus streamlining the whole process.[174]
MFENGU LOADING WOOL (1860s)


MFENGU LOADING IVORY (1860s)


Port Elizabeth Public Library
Early in 1854 the Mfengu and boatmen struck for higher wages as well as for stopping work at 1pm on Saturdays. The boatmen wanted 7s 6d a day and the Mfengu 6s. Local artisans proposed to do the same. (175) There was such a demand for labour in Port Elizabeth that common mason's labourers were getting as much as 4s a day at a time that the average Cape farm worker was getting just over a shilling. [176] The Herald saw high wages as a short term expediency: (177)

The antagonisms of man is often turned into praises of his opponent. This truth we trust is about to be verified on the beach of Port Elizabeth. There the boatmen and Fingoes have struck for an advance of wages to the extent of 50 per cent on what they were previously receiving, and we are of the opinion that if the companies act wisely, they will meet the demand and thereby more speedily correct the error. Labour will rush where wages so high are paid and it will then be in the hands of the employers to reduce the rates as far as they may now be compelled to advance them.

At the same time, it was optimistically pointed out, the construction of the proposed breakwater would eventually do away with the need for both boatmen and beach labourers.

In the meantime, as the town grew, many Mfengu were compelled to live northwest of the town near the Swartkops River, far from the town centre. This prevented them from tending their garden plots during the lunch hour. When the artist Thomas Baines landed in 1848 it was not uncommon for the Mfengu to take a three-hour lunch break. (178) Their gradual removal from the town centre forced them to either work for wages or farm full time. (179)

Towards the end of 1855 when work was about to start on the proposed breakwater scheme, the harbour board applied for the use of black labour. The governor, however, could give no assurances and warned the board that it was a bit much to expect other blacks to be satisfied with as little as 1s a day if the Mfengu earned up to 5s. (180)
In mid-1856 the Mfengu struck for 6s 6d a day which they received. The Malay boatmen followed suit and demanded 9s. This once again raised the jetty question: "the community would be rendered to some considerable extent independent of any one particular class of labor". (181) The immediate problem was that only Mfengu were prepared to do beach work: (182)

Their wages at the present time are exorbitantly high, but they know their power. They have already struck more than once for an advance of wages, and in each case their employers have had to submit to their demands, and were they to strike again the same result must follow, or the business of the port must come to a standstill.

Some Port Elizabeth residents, however, still felt that nakedness was more of a problem than Mfengu strikes. "Since Sir Henry Young expressed his disgust, prosperity has made the town people more callous to the evil". (183)

Local employers were aware that all work at the beach, including breakwater construction, could be paralysed by the Mfengu at any time. (184) But this soon changed as thousands of starving Xhosa entered the Cape seeking employment after the disastrous cattle killing episode in 1856/57. Some estimates put the figure as high as 30000. (185) The effects were soon felt on the beachfront: (186)

Since the introduction of Caffre labor (sic) into this Division, there is a manifest alteration in the conduct of the Fingoes, who are said to be tampering much with the former and making them dissatisfied. The Fingoes have the common sense to see they can no longer demand any exorbitant price for their labor, and look upon the introduction of the Caffres as a sort of infringement on their rights. (187)

Mfengu reaction to the introduction of rival labour was eventually stamped out. The Mfengu township at Port Elizabeth was placed under
magisterial supervision and two special constables appointed to deal with trouble makers. The clothing issue was seen as another infringement of Mfengu rights:(188)

Several Fingoes were recently taken up for roaming about the Location in a state of perfect nudity, one of whom declared to the police that before he would wear clothes he would suffer transportation to England; however he sang a different song before the Court...

As employers, the increased supply of labour put the boating companies into the dominant position. For example, a Mfengu strike towards the end of 1857 was unsuccessful:(189)

These gentry struck for an advance from 6s. 6d. to 7s. 6d.; and the Boating Companies by a firm resistance to their demands succeeded in reducing the former exorbitant charge to 5s. 6d.

In addition, the boating companies insisted upon "a more regular attendance" by requiring the Mfengu to take only an hour for breakfast and lunch breaks. An attempt by the PE Boating Company to establish a less labour intensive method of handling goods on the beach during 1857 also played a crucial role in these developments:(190)

The building of a jetty by the Port Elizabeth Boating Company has been a very significant hint to these people, that their rule on the beach will no longer be tolerated. We would undoubtedly have them well paid - to work hard ten hours a day in the water is no trifling tax on a man's energies, for which he ought to be handsomely remunerated, and we consider 5s. 6d. a full equitable reward for the services performed.

The power of the Mfengu beachworkers was thus broken. Although the enclosed breakwater scheme was a dismal failure and the Port
Elizabeth boating companies remained dependent on beach labour for some time to come, competition from other black labour substantially weakened the Mfengu bargaining position. Thereafter beach labour was no longer a Mfengu preserve. Another contributing factor to the disappearance of the Mfengu stranglehold on beach labour was the granting of freehold land to the Mfengu in British Kaffraria during the 1850s by the governor, Sir George Grey (1854-61). (191) A number of the relatively wealthy beach labourers would have been enticed back to agriculture. Most merely saw beach labour as a means to this end. (192)

Although landing goods on the beach remained important right up to the 1880s, the construction of jetties in the 1870s reduced the boating companies' reliance on one landing method. Fewer labourers were required on the jetties where the work was also less demanding. By 1884 labourers working boats at the jetties were earning 1s a day less than their beach counterparts while men loading trucks got 2s less. (193) On the beach 28 men were needed to discharge a boat - eight in the boat and the rest carrying the cargo ashore. Because there was more room on the beach, the major advantage was that each company could handle more cargo there than at the jetties - up to 14 boats a day each compared to 10 at the jetties. Each boat carried about 25 tons of cargo. (194)

It would be stretching a point to try and link the Mfengu strikes to any form of trade unionism. They merely assimilated the norms of beach work. Even in the 1820s the boatmen were very well aware of their position of strength. There were frequent complaints that they only worked when it suited them. (195) This tradition would have been observed and taken over by the Mfengu and used to their own advantage. As already noted, by 1840 the Mfengu refused to work during bad or cold weather. This can hardly be seen as striking - it merely followed local precedent.

The Mfengu were, however, responsible for South Africa's first recorded strike on Monday, November 9, 1846 when they struck for higher pay. This was over seven years before the previously supposed first
by the Table Bay boatmen in 1854.[196] The Mfengu were obviously bargaining from a position of strength.[197] No-one else was prepared to do the work and there was a chronic labour shortage after many Mfengu had left to take up land on the frontier.

Their second strike in June 1852 was for somewhat different reasons. It was in protest against a town regulation requiring them to work clothed. Their third strike in February 1854 is also before that of the Table Bay boatman which only occurred a few weeks later. It is therefore likely that the Capetonians were merely following suit. The Port Elizabeth strike was a general one which included the beach labourers, the boatmen and possibly local artisans as well. There was a chronic shortage of labour as reflected by the relatively high local wages.

The collapse of the Mfengu dominance of beach labour in the late 1850s and the construction of jetties in the 1870s did not see an end to strikes. There were strikes at the beachfront in June 1872, August 1876 and July 1877.[198] All three, however, involved Mfengu. In the 1877 strike 79 harbour board labourers struck for 4s a day. All five "ringleaders" arrested were Mfengu. They were given the option of a £1 fine or seven days.[199] Thereafter until the end of the century no more strikes are recorded. This is attributed to the 9th Frontier War (1877-78) which forced a flood of Xhosa onto the Cape wage-labour market.[200] Although wages for beach labour were less volatile than others in the area between 1857 and the 1880s, they followed the same trend. All wages were higher in 1872 than they had been in 1858 but all had dropped by 1884.[201]

It is clear that nobody benefitted from the first conflict of interests between white employers and black workers in South Africa. The boating companies attempted to break the power of the beach labourers by demanding improved harbour facilities. But the resultant breakwater, as will be shown, was a disastrous failure. On the other hand, while the breakwater itself had no effect on the Mfengu beach labourers, the coincidental influx of alternative labour did.
2. 3ft = 0.914m
3. 20ft = 6.1m
4. Soonike (undated) pp 38-45, Theal vol I p 62
5. Soonike (undated) pp 45-47
6. RCC vol XXI p 205 - 24/2/1822 Evatt to govt sec
7. CO 235 No 289 undated 1825 - Ward to govt sec
8. ibid. Although Ward stated there were six boatmen, the 1827 civil establishment list records only five boatmen at Algoa Bay - RCC vol XXXV p 66.
10. RCC vol XXXV p 285
11. CO 359 No 96 12/9/1828, No 102 24/10/1828 - PE collector of customs to govt sec
12. ibid
13. CO 359 No 102 24/10/1828
14. CO 5727 sch 10 No 4 24/10/1828 - PE collector of customs to govt sec: remark
15. M164 23/7/1830 - govt sec to PE port captain
16. M164 20/8/1831 - govt sec to PE port captain
17. The 1838 commissariat contract, for example, required the provision of up to three surf boats with specified rates for handling stores, troops and their kit, women and children - GTJ 7/12/1837 p 1 - commissariat notice.
18. GTJ 7/11/1839 p 1
19. GTJ 19/7/1838 p 3 - letter to Lloyds dated 10/1/1838
20. Presumably 6 shillings a ton and not 6 "skillings" - see charge for 1840.
21. GTJ 9/7/1840 p 2
22. ibid - editorial comment
23. ibid - editorial comment
24. ibid
25. ibid
26. GTJ 23/7/1840 p 1 - dissolution notice dated July 1, p 4 - Minter's notice to land goods at 6s a ton dated July 14.
27. GTJ 16/7/1840 p 1 - Whyat's notice dated July 14
28. GTJ 29/7/1841 p 1
29. No mention is made of the formation of PEBCo in GTJ during 1841. It is first referred to in 1844 - GTJ 8/2/1844 p 1. The year of establishment is given as 1841 in subsequent share lists published in the press eg PET 13/8/1862 p 1, EPH 7/9/1865 supp p 1 and following lists.
30. By 1844 Yatton was replaced as PEBCo clerk by a Mr Edes, who in turn had given way to Sam Smith by 1846. It was sometimes merely referred to as the "Boating Company" - Chase (1843) p 303, CA (1843-47) - listings of Port Elizabeth companies.
31. GTJ 8/2/1844 p 1. Referred to as PEBCo by now.
32. GTJ 25/4/1844 p 1
33. EPH 17/1/1846 p 1
34. See motivation behind formation of EPBCo. One of its directors was J O Smith who had operated a boating establishment in the early 1840s.
35. EPH 28/11/1846 p 2
36. EPH 17/4/1847 p 2. Subsequent share lists date its establishment at 1846. But it commenced operations on 1/6/1847. The directors were: J Simpson (chairman), W Dodds, G Garside, E H Salmon and J O Smith; the superintendent was E H Wheatland and the clerk W Bramwell - EPH 15/5/1847 p 3.
37. EPH 24/6/1848 p 4
38. EPH 7/7/1849 p 4. The boating company directors in 1849 were:

PEBCo - J W Kemp, W Smith and A Jarvis with T Gubb as superintendent and S Smith as secretary; EPBCo - W M Harries, E Slater, B Dietz, and G Griffiths with E B Wheatland as superintendent and W Bramwell as clerk - CA (1850).
39. EPH 30/6/1849 p 1
40. EPH 29/6/1850 p 1
41. EPH 2/7/1858 p 1, 23/7/1858 p 1. A ton was defined as 272kg of washed or 363kg of unwashed wool.
42. EPN 14/9/1850 p 4, 12/4/1851 p 2
43. EPN 28/9/1850 p 4
44. EPN 19/10/1850 p 2, 26/10/1850 p 2
45. EPN 23/11/1850 p 2
46. EPN 12/4/1851 p 2
47. a. PET 11/9/1851 p 4
   b. EPN 5/10/1851 p 4
48. EPN 15/11/1851 p 4 - advert dated Oct 10
49. EPH 6/11/1851 p 1, 15/11/1851 p 1, 29/11/1851 p 4
50. EPH 14/7/1857 p 2
51. EPH 26/7/1853 p 2
52. 1st reference to Dawson's is when a man is drowned after one of Dawson's boats capsized - EPN 30/8/1853 p 4.
53. EPN 28/6/1853 p 2
54. EPN 5/7/1853 p 4
55. EPN 6/9/1851 p 1
56. EPN 29/11/1851 p 2
57. EPH 16/5/1854 p 3
58. EPH 24/2/1857 p 2
59. EPH 3/3/1857 p 3
60. EPH 26/2/1858 p 4
61. EPH 3/11/1857 p 4
62. EPH 20/10/1857 p 2, 27/10/1857 p 2. See next section on Mfengu & beach labour for motivation behind constructing the jetty.
63. EPH 1/10/1858 p 2
64. EPH 15/10/1858 p 3
65. EPH 17/12/1858 p 2
66. EPH 8/1/1859 p 1, 18/3/1859 p 2
67. EPH 11/3/1859 p 4
68. EPH 2/3/1860 p 3 - PEBCO advert
69. EPH 16/3/1860 p 2
70. EPH 2/3/1860 p 4
71. EPH 11/1/1861 p 3 - letter from W Cairncross, chief officer of the JANE SYMONS
72. EPH 12/4/1861 p 3 - reply to Cairncross letter by "Justice"
73. EPH 26/4/1861 p 3 - Cairncross reply
74. EPH 31/5/1859 p 4
75. EPH 5/7/1859 p 4
76. EPH 6/5/1859 p 4
77. EPH 6/5/1859 p 3 - joint letter from 13 shipmasters
78. ibid - letter from Master of the BEN MUICK DHUI, Alexander Dunlop. It should be noted that part of the problem was that these events took place at the height of the wool season and priority could have been given to ships taking on wool. A report in the same newspaper notes that local wool pressing plants were working day and night "so numerous and urgent are the demands made upon them" - p 4.
79. EPH 8/7/1859 p 3
80. EPH 10/4/1860 p 4
81. Delays through more than one boating company handling a ship's cargo were still being complained about in 1865. The SUSAN PARDEEN was discharged in a month because it was only handled by UBCo. On a previous occasion three companies had taken six weeks - EPH 26/8/1865 p 2.
82. EPH 19/8/1859 p 4 - letter from "One Disgusted"
83. EPH 29/11/1859 p 2
84. Displaying the black ball when the surf was too dangerous for landing passengers was practised "up to the time the present Port Captain [H G Simpson] entered upon the office" in 1855 - EPH 29/11/1859 p 2.
85. EPH 24/4/1860 p 3
86. EPH 14/7/1857 pp 1 & 2, 21/7/1857 p 1, 11/8/1857 p 3, 25/8/1857 p 1, 1/9/1857 p 1. The managing director of the old Algoa Bay Mooring & Watering Company was T W Gubb. The directors of the new Algoa Bay Watering Company were: G Chabaud, J E Black, H Brown and A J Clairmonte; secretary: T Wormald; and manager: Thorogood.
87. EPH 25/12/1857 p 4, 8/1/1858 p 4
88. EPH 16/8/1859 p 2
89. EPH 11/2/1860 p 3
90. EPH 11/9/1859 p 4
91. EPH 11/2/1860 p 3
92. EPH 18/10/1859 p 4
93. EPH 13/1/1860 p 3
94. EPH 7/2/1860 p 4
95. EPH 8/5/1860 p 2, PET 10/5/1860 p 2
96. EPH 18/12/1860 p 3, 4/1/1861 p 4. Present at the Algoa Bay Watering Company meeting were: Brown, Dunn, W Fleming (Jnr), W M Innes, J Williams, W Smith, J Graham, N G [A G?] Warren, G W [T W?] Gubb, Dr Davies and Dr Dunsterville.
97. 1 ton = 909 litres
98. EPH 8/1/1861 p 4
99. a. EPH 26/7/1861 p 2, 15/8/1861 p 1. Nothing is known about the financing of the "New" watering company. Advertisements were signed on behalf of the shareholders by its acting-secretary, W Fleming, whereas T Wormald had handled these affairs before. b. EPH 14/3/1862 p 1
100. EPH 11/10/1861 p 1
101. EPH 17/5/1864 p 3 & supp p 4
102. The PEHB started supplying water to ships on 1/1/1881. It soon reduced its charge from 10s 6d to 7s 6d per ton of 1137 litres compared to the 12s 6d formerly charged by private water boats - G24/1882 p 6 - 1881 PEHB report.
103. EPH 6/3/1860 p 3
104. EPH 13/4/1860 p 2
105. EPH 17/4/1860 p 4
106. EPH 1/5/1860 p 4
108. EPH 17/7/1860 p 3. Although the exact details of PEBCo's financial manoeuvres are unknown, by 1861 the dividend per share was up to £8 and while £25 had been paid-up on each share which were worth £60 - EPH 16/7/1861 p 3. In 1863 the shares were listed as "new" but the price had dropped from a high of £95 (1861) to £60 (1862) to £50 (1863) - see Table 12.
109. EPH 19/10/1860 p 2
110. EPH 7/6/1861 p 1, 26/7/1861 pp 1-2, 13/8/1861 p 1, 16/8/1861 p 1
111. EPH 1/11/1861 p 1
112. EPH 17/7/1863 p 3
113. ibid
114. EPH 17/7/1863 supp p 1
115. EPH 21/6/1867 p 2
116. EPH 2/7/1867 p 3
117. EPH 15/1/1861 p 3, 15/2/1861 p 1 - Wheatland's partner was T Smith
118. EPH 2/5/1862 p 4, 6/5/1862 p 1, PET 17/5/1862 p 4, 21/5/1862 p 1. The provisional committee was: J Williams, Wm Smith, G Reed, S Baine, J O'Shea, C Chapman and J Mason.
119. EPH 14/8/1863 p 4
120. EPH 26/2/1864 p 1
121. CPE 1/1/6 3/11/1864 - CTCC to PESC. The letter is filed under 1869. But this is impossible as the company was wound up in 1866. Thus it is more likely that a badly written 1864 was read as 1869.
122. CPE 1/1/4 14/8/1865 - CTCC to PESC
123. PET 12/6/1866 p 1
124. ABL&FCo shares: paid-up - 10s, selling price - 10s - PET 8/6/1866 p 3, 6/7/1866 supp p 1.
125. EPH 5/2/1864 p 4 - ABL&SCO prospectus. See also EPH 9/2/1864 supp p 1, 12/2/1864 supp p 1, 16/2/1864 p 4 - letters from "A Proprietor" and "A Shareholder in one of the old Boating Companies". Totally unrelated to the abortive ABL&FCo.
126. ABL&SCO: £2 per share was to be paid on allotment and £1 three months later. If ever required, shareholders' permission would be obtained before calling in any part of the remaining £7.
127. ABL&SCO directors were: G Saxon (Anderson, Saxon & Co) - chairman, H B Christian (J O Smith & Co), A Barsdorf (Lippert), A C Stewart (Stewart & Co), L Bramson (Mosenthal & Co) and E Slater (Slater & Co). It was estimated the six trading houses alone would give the company up to 100 cargoes worth of business a year.
128. The first year's payments to Dawson were £450 (interest) and £750 (instalment).
129. ABL&SCO took over Dawson's leases of PEHB land which still had 27 years to run.
131. PET 5/2/1867 p 2, EPH 15/2/1867 p 2 - Here EPH gives the ST CROIX's owners as USCQ and mentions that its superintendent, James Searle, got her off safe and sound. But after the 1869 storm the owners are again given as ABL&SCO - EPH 1/10/1869 p 3.
132. Redgrave (1947) p 248
133. EPH 11/2/1868 p 3 - year ended 31/12/1867
134. PET 10/2/1865 p 1 - UBCo prospectus. The directors were: J Simpson, J H Clarke, G C Smith, C T Jones, M H Benjamin and F S Fairbridge.
135. PET 3/3/1865 p 2
136. PET 10/3/1865 p 2, 17/3/1865 p 3
137. EPH 6/4/1866 p 2
138. EPH 5/4/1867 p 3 - year ended 28/2/1867
139. The additional shares brought the total number of UBCo shares to 3927.
140. EPH 10/4/1868 p 2
141. PET 29/10/1869 p 2
142. PEHB committee report (1884)
143. G73/1897 pp 7-8 - 1896 PEHB report
144. One of the lighters was iron, the rest were wooden.
145. Butler (1974) p 99. A painting dated 1841 of blacks carrying settlers ashore is used to illustrate this. But it is more likely that this picture was based on contemporary scenes adapted to portray the 1820 landing, than on actual settler "hearsay" as is claimed. In fact the picture is used to illustrate how passengers were landed in 1850 by the EPH Special Harbour Supplement 28/10/1933 p 7.
147. Ayliff (1963) p 46 footnote - letter written in 1861
148. See Table 13.
149. Moyer (1976) pp 290
150. GTJ 23/1/1835 p 4 - letter of thanks from the commandant of Fort Frederick, Francis Evatt, expressing the "warmest thanks to the Hottentots and colored population at large, of this Town and vicinity, for...the laborious duties they have performed up to their necks in water, landing Government stores". See also GTJ 9/7/1840 p 2, Chase (1843) p 238.
151. Chase (1843) p 238
152. GTJ 19/10/1837 p 2, 12/10/1837 p 3
153. GTJ 4/1/1838 p 3 - letter from "An Old Farmer", Uitenhage
155. Chase (1843) p 238
156. See Table 13.
157. Moyer (1976) p 290
158. GTJ 9/7/1840 p 2
159. Chase (1843) p 238
160. EPH 14/11/1846 p 2
161. ibid p 2
162. EPH 19/12/1846 p 2
163. Moyer (1976) p 292
165. EPH 11/11/1848 p 2 - editorial comment
166. EPH 7/12/1850 p 2
167. EPN 22/6/1852 p 2
168. GTJ 21/5/1840 p 3 - letter from "Blush"
169. Sir Henry Young (1847) was lieutenant governor.
170. EPH 25/11/1856 p 3 - letter from "Progress"
171. PEHB-govt correspondence (1854) p 8
172. EPN 14/6/1853 p 2. See section on PE Wharf Company in Plans.
173. EPN 29/11/1853 p 1
175. EPH 7/2/1854 p 2
176. EPH 14/2/1854 p 3. See Table 13.
177. EPH 31/1/1854 p 3
178. Kennedy (1961) p 20
179. Initially the Port Elizabeth Mfengu lived in four areas: at the landing beach itself, at Hyman's Kloof (Russell Road), and in two villages at opposite ends of the town about 15 minutes walk from its centre - Moyer (1976) pp 299-300.
180. EPH 27/11/1855 p 2
181. EPH 3/6/1856 p 2
182. EPH 15/8/1856 p 2 - letter from "Mercator"
183. EPH 25/11/1856 p 3 - letter from "Progress"
184. ibid - letter from "Daniel Doyce"
186. EPH 12/3/1858 p 3
187. Fighting between Xhosa and Mfengu was not uncommon in Port Elizabeth. It reflected the general hostility between the two tribes. One such fight took place in November 1850. Thirty Xhosa and 60 Mfengu were involved. Constables eventually were called in. Two Xhosa were killed and the rest beaten back and injured - Moyer (1976) p 304.
188. EPH 12/3/1858 p 2
189. EPH 1/1/1858 p 3
190. EPH 20/10/1857 p 2
192. Chase (1843) p 238
193. Wet beach work 5s 6d, loading trucks 3s 6d, labourers in boats at jetty 4s 6d, labourers in trucks 3s 6d - PEHB committee report (1884) p 1.
194. PEHB committee report (1884) p 2
195. See previous section on Boating companies for detail.
196. See Mabin (1983a) p 3-5
197. Mabin (1983a) outlines three categories of early strikes:
   1) Workers in positions of strength.
   2) Workers and deteriorating conditions.
   3) Organised workers.
198. Mabin (1983a) pp 6-7
199. EPH 20/7/1877 pp 5 & 6
200. See Mabin (1983a) pp 6-7
201. The strike in 1872 raised beach wages to 6s 6d at a time artisans were getting 10s, farm labourers 2s 6d and domestic servants 1s 10d. Compared to 1858 wages this was a relative change of +15%, +40%, +25% and +100% respectively. By 1884 "wet" beach labourers were paid 5s 6d a day compared to the 7s 6d being paid to artisans. Farm labourers were getting 1s 6d and domestic servants 1s. A change of -17%, -25%, -40% and -14% respectively. Sources: Mfengu beach wages: EPH 1/1/1858 p 3, Mabin (1983a) p 6, PEBB committee report (1884) pp 9-10; other wages (Uitenhage district as no returns for Port Elizabeth) - BB (1858) pp CC 2-3, BB (1872) pp CC 2-3, BB (1885) p 407.
4. EARLY HARBOUR DEVELOPMENT
4. EARLY HARBOUR DEVELOPMENT: 1820-50

4.1 MOORINGS: 1820-30

Nothing was done to improve landing facilities at Algoa Bay before 1820 apart from setting up a flagpost on the landing beach with the dual role of marker and signal as to whether it was safe to land or not. (1) The 1820 Settlers, however, temporarily changed the government's attitude towards Algoa Bay. Even before their arrival, the government planned to lay chain moorings at Algoa Bay. An 1179 kilogram anchor was bought for this purpose by the Table Bay deputy port captain, William Bridekirk, in April 1820. He considered it a bargain at R$442. Although it was R$192 more than the original estimate, he considered it "a trifling difference when quality and utility is taken in consideration". (3)

Moorings for Algoa Bay were also suggested by Captain Fairfax Moresby of HMS MENAI who was in charge of landing the settlers at Markham's cove. He noted that: (4)

should Port Elizabeth ever become a place of commercial consequence, chain moorings, or even anchors of a larger size with chain cables should be laid down for those ships that wish to approach near the shore, for the purpose of loading or unloading. The expense (sic) would not be very great, and a small tax for such an accommodation, would be cheerfully paid.

I do not make this remark from the insecurity of the bay, for I consider it at all times equal to Table Bay, and for six months very far its superior.

Moresby went on to point out that two recent wrecks were as a result of bad tackle rather than the force of the wind. After surveying the coast as far east as the Keiskamma River, he reckoned that Port Elizabeth was the only place, except for perhaps the Swartkops River, from where an extensive coasting trade could develop. But to make Algoa Bay a safe proposition, he recommended that a lighthouse be built at Cape Recife.
The western edge of Algoa Bay was chosen as the site to land the 1820 Settlers because it was the only relatively safe natural landing place on the eastern Cape coastline - see map. The presence of a British garrison at Fort Frederick made it even more attractive. The wisdom of this choice was borne out by the fact that there was not a single casualty while the 3659 settlers were landed through the surf. (5) The success, however, was largely attributed to the skill of the men of the navy and the garrison, rather than the safety of the beach itself. (6) A large flat boat had been brought out by the storeship WEYMOUTH especially to land them on the beach. (7)

The settlers were soon moved to their locations along the frontier, thus transferring the need for a port further east, away from Algoa Bay. Despite the fact that the acting-governor, Sir Rufane Donkin (1820-21), had named the fledgling town at Algoa Bay Port Elizabeth after his late wife, he took a personal interest in attempts to establish a port at the mouth of the Kowie River because it was in the heart of settler country and closer to the frontier. On his return the governor, Lord Charles Somerset (1814-27), also supported the Kowie as a port although he reversed most of Donkin's other schemes.

Apart from the government moorings laid for the LOCUST, others in time were put down by private individuals for regular traders. But moorings were no guarantee of protection. In March 1823 the HEWORTH obtained special permission to use the LOCUST's moorings because she was carrying government stores. Within four hours of taking them up, a southeast gale forced her to part and she was driven ashore near the landing place. Although the cargo was saved, a soldier from Fort Frederick, who had been helping, was killed when he was dashed against the rocks. (8) In May 1824 the brig SINCAPORE (sic) suffered the same fate despite being attached to moorings. The reason given was "the unaccountable defect in the Mary's moorings, which were deemed sufficiently strong to hold any vessel visiting that port". (9)

In April 1825 Captain James Smith of the brig USK complained that unmarked mooring anchors and chains were strewn about the best
anchorage at Port Elizabeth. They were dangerous in that they were liable to cut ship's cables, especially during gales. At least four anchors and chains were identified. Three belonged to the LOCUST and one to Chiappini & Co. Smith recommended that they be removed. The deputy port captain at Table Bay, William Bridekirk, admitted that the government mooring chains were broken and all the anchor buoys lost. He suggested that temporary buoys be put in place but felt that the damaged moorings should have been removed "long ago by the Locust".(10)

Spurred on by the governor's attempts to improve the Kowie as a port, in July 1825 some residents of the Uitenhage district approached him about having a wharf built at Port Elizabeth, similar to the one at Cape Town. In anticipation of direct trade, it would mean "an immense saving would occur to Merchants in not having to provide surfboats". (11) Although Somerset agreed on the advantages of the project, he felt the colony could not afford it. He did, however, support an earlier appeal to have one built at the Kowie. (12) Officially the British government rejected the Port Elizabeth scheme because of the embarrassed state of the colonial treasury. (13) It should be noted that Cape Town was finding it equally difficult to get government finance for harbour development during this period. (14)

By 1826 the Port Elizabeth customs official, William Dunn, was promoting a jetty because it would make the landing of goods possible in almost any weather conditions: [15]

From the Heworth (a stranded ship) [16] remaining so long entire even after her Timbers (Beams) have been sawn asunder - I believe that a Platform erected on the Beach like that at Table Bay would render the landing at all times easy...[17]

It being the age of engineering marvels such as suspension bridges and floating jetties, Dunn was sure that an engineer would be able to supply an instant "Prescription". He believed about £5000 would have to be spent. To encourage government interest, he noted that his
suggested improvements would do away with the expense of a boating establishment. Instead, wharfage dues would become a source of income. (18) On the other hand, one of the advantages to shipping, of having no facilities at Port Elizabeth, was that there were no wharfage dues.

Apart from the now abating threat of the Kowie as a rival port, in the late 1820s it was even suggested that the Kramme River in nearby St Francis Bay be opened as a port. But nothing ever came of this proposal by the residents of the Graaff-Reinet, Uitenhage and George districts. (19)

In June 1827 D P Francis, an 1820 settler who had returned to England, was notified that he had been appointed Port Elizabeth's first collector of customs and port captain. He informed the authorities that he intended leaving England for the Cape in July to be in good time to take up his £400 a year post on January 1, 1828. (20) He had applied for a job in the customs department as early as 1825. (21)

The 1828 report of the commission of inquiry into Cape trade and harbour facilities recommended that a floating jetty be built at Port Elizabeth. The reason given was the inefficiency of the boatmen and labourers engaged in landing goods through the surf. (22) In January 1829 Captain James Scorey erected a flagstaff for the use of the port. (23)

The only other improvement to port facilities during this period was the provision of water to ships by a Malay, Fortuin Weys. (24) He erected a pump and laid pipes from it to the landing beach. (25) Weys by 1834 was described by Thomas Pringle as "one of the wealthiest and most respectable inhabitants of the place". (26) He had originally been granted land at Algoa Bay in March 1820. (27) By the time the settlers landed his house, still under construction, was the second substantial one to be built at what was soon to become Port Elizabeth. (28) He was listed as a blacksmith by Griffin Hawkins in 1822. (29) In time he acquired a number of properties in the town and further afield. (30)
4.2 THE FIRST SCHEME: 1831-36

The first practical scheme to improve Port Elizabeth harbour facilities dates back to late 1831 because early in 1832, on February 6, a meeting was convened in Uitenhage by the commandant of Fort Frederick, Captain Francis Evatt, to discuss the construction of a jetty at Port Elizabeth. (31) The idea was sufficiently advanced by then for two models of the proposed jetty to be displayed at the meeting. One was the work of the newly appointed harbour master, Edward Wallace (1831-34), who had held the same position at the Kowie until its demise as an official port. [32] The other was made by Lieutenant F B Fielding of the 98th Regiment. At the meeting it was unanimously decided to approach the British government on the matter and a committee was appointed to draw up a petition. (33)

But a damper was thrown on the whole idea of a jetty by an announcement in the Government Gazette. A stone pier was to be built in Table Bay "which will necessarily lead to the cessation of all expensive works, however, important, in other parts of the Colony". (34) A letter to the editor of the Graham's Town Journal observed that calculations indicated that the Table Bay pier would take five years to build. Knowing government undertakings, however, the writer of the letter reckoned on at least 10 years before money would again be available for projects in the Eastern Province. Therefore, he called for a direct petition to the British government on the crude methods of shipping goods at Port Elizabeth. (35) The Table Bay announcement did not affect local resolve to build a jetty.

Another meeting was held on March 3 where a third model was displayed. (36) The cost of each of the three projects had also been worked out. One required 3000 guineas and the labour of 50 convicts. The other two needed £3000 each. In addition, the new projector, John Parkin, offered to maintain his jetty for 10 years in return for £50 a year. Knowing that the government was committed to Table Bay harbour development, the meeting decided to raise funds by selling £25 shares and applying for an ordinance to secure the rights and interests of the shareholders. A committee of nine was elected to get in touch with interested parties in other parts of the colony. The
Graham's Town Journal correspondent went on to state:

The erection of a Pier in Table Bay at the expense of the government should act as a stimulant in this part of the colony; if government have not the funds in hand to build a Jetty at Port Elizabeth, they certainly will not, like "the dog in the manger," prevent us building one at our own expense. I cannot help observing how little government in any single act has done for Port Elizabeth, it appears a discarded child, and only entitled to that support which it has received from nature, and which power cannot destroy.

By now prominent Port Elizabeth businessmen had begun to show interest in the scheme. None other than the "founder of the Eastern Province commerce", Frederick Kersten from nearby Cradock Town, became chairman of the jetty committee. Kersten submitted the "string of resolutions" taken at the meeting to the government. He also enquired if it would be a government project and whether there was any objection to it being a private undertaking. The government, however, would not commit itself until the models and estimates had been examined.

Another meeting was held on April 20 where it was decided to immediately open a share list. There were to be 300 £25 shares which were to be paid for as required by the directors. As yet, the whole scheme still had to be sanctioned by the governor. At the meeting £1700 was committed by potential shareholders. Within three days, 120 shares worth £3000 had been taken up, causing the Graham's Town Journal correspondent to observe:

> It will therefore be well for the merchants in Graham's Town who wish to become shareholders to make a speedy application, otherwise they will be shut out; the full amount of shares will be taken 'ere 10 days are over.
Despite the government's non-committal approach, on April 24, the acting secretary, W M Harries, was authorised to warn prospective investors that 60% of the shares had already been subscribed. A £1 deposit would be required if the scheme was sanctioned by the government. Subsequent calls for money would not exceed £5 a share at a time. (41) Harries followed-up Korsten's earlier enquiry by also communicating with the government secretary on the matter. (42)

The surveyor general, Charles Michell, and the government architect, John Skirrow, made their report on the models in June: "we regret to state that it is not possible for us to form any correct idea of what so important a structure ought to be in the absence of proper data". (43) Their report was forwarded to the jetty committee for consideration. (44) Although more information was obtained, in July the two engineers reported: (45)

the Committee have not perceived the full extent of the importance of the queries we addressed if we may be allowed to judge from the brief manner which we are referred to materials by far too vague for the purpose in question, particularly when intended to form the judgement of persons far removed from, and altogether unacquainted with localities.

They therefore recommended that a proper survey be made by a qualified engineer. The jetty committee suggested that a military engineer stationed on the frontier would be suitable. By September the governor had given permission for one of the officers to undertake the survey and report on the suitability of the jetty committee's proposed site. However, as no provision could be made to finance it out of public funds, it would have to be done at the convenience of the commanding officer. (46) But nothing further came of this proposal.
Failure of the first scheme:
The governor’s report for 1832 noted that no public works were undertaken in the Cape colony during the year except for the Table Bay pier. "At Port Elizabeth", however, "there is a similar undertaking in contemplation but on a smaller scale, and the Inhabitants of the Place are endeavouring to raise a Fund by Subscription for that purpose."(47) In April 1833 the jetty committee approached the deputy surveyor general, W F Hertzog, through their Cape Town agent, J C Chase, to inspect their intended site.(48) Because Hertzog was going to be in the area anyway to survey the Kat River settlement, the governor gave permission for him to stop over in Port Elizabeth and collect the data needed by the surveyor’s office in Cape Town.(49) Hertzog was instructed to survey the proposed site and see how near it was to a quarry. He also had to find out the cost of local labour.(50)

In May 1833 Hertzog arrived in Port Elizabeth to carry out his inspection.(51) But he reported back to government that he was "unable to give information in respect to the spot chosen...as he has not been made acquainted with...(the jetty committee's) determination on the subject, nor received any answer to the letter he addressed to (them)".(52) As a result the governor could only refer the committee to Hertzog’s own plan for the site he had chosen.[53] Supported by Francis Evatt, the committee disputed Hertzog’s allegation. They did, however, accept his proposed site and moves were made for the government engineer to design a suitable structure.(54)

Thereafter, the project seems to have faded away. It was subsequently never approved or rejected by the government. There is no comment to this effect in the local press nor is there any trace in the Cape archives. Although another petition on the matter was circulated in Port Elizabeth and Grahamstown by mid-1834, nothing came of it.(55)

One of the reasons for this dead end might have been the fact that there were numerous changes in the administrators of the colonial office in Britain between March 1833 and April 1835. This was as a result of the clash between William IV and his Whig prime ministers
which resulted in the last attempt by an English monarch to impose a minority ministry on parliament.[56]

The period also coincided with the British clampdown on the Cape government's overspending. The axe had fallen as early as 1831 when the colonial secretary, Viscount Goderich (1830-33), imposed detailed lists of a new and curtailed civil service on the governor, Sir Lowry Cole (1828-33).[57] A new and further reduced schedule of the Cape's authorised civil service came into effect on July 1, 1834. It "was generally believed at the Cape that the colony was being made an example of by the British Government in order to placate a growing feeling in England that administration was carried on on a lavish scale".[58]

The Port Elizabeth jetty project was not the only one to run into trouble. After work had already begun, provisional permission to construct a stone quay at Table Bay was withdrawn in 1833 by Goderich's successor, Viscount Stanley (1833-34). The reason given was that the subsequently calculated cost of £17000 was too expensive a project for the Cape's current financial position.[59] In addition, one of the instigators of the Port Elizabeth scheme, the harbour master, Edward Wallace (1831-34), died, aged 42.[60] These two events must have put a damper on enthusiasm for harbour development.

While Sir Lowry Cole had been willing to authorise developmental projects like Sir Lowry's Pass without waiting for permission from Britain, his successor, Sir Benjamin D'Urban (1834-37), was not known for his swift decisions. On top of this he was charged with implementing the constitutional changes drawn up in the letters patent of October 1833.[61]

Whatever actually happened to Port Elizabeth's first jetty scheme is unclear. But the whole episode was definitely disrupted by the 6th Frontier War which broke out at the end of 1834. As a result, martial law was proclaimed throughout the eastern Cape. Although most districts were deproclaimed in June 1835 after hostilities had ended, it remained in force in the Port Elizabeth and the immediate frontier
districts until July 1836.(62)

The war rudely reminded the government of the distance Port Elizabeth was from the frontier. Thus renewed interest was shown in the Kowie as a port. By the late 1830s the government had sanctioned a scheme to make the river navigable by changing its course.[63] As a direct result Grahamstown support for the Port Elizabeth scheme waned in favour of the closer port. Indirectly, the war had an important long-term influence on the handling of cargo at Port Elizabeth. Mfengu, resettled in the colony after the war, became the most important source of beach labour by 1840.[64]

4.3 THE FIRST JETTY: 1837-43
An event took place in Cape Town in June 1836 which turned thoughts in Port Elizabeth back to harbour development. A start was made in forming the Cape of Good Hope Steam Navigation Company whose object was "the speedy and regular conveyance of goods and passengers between the Eastern and Western Provinces" using "one or more Steam Vessels".(65) Promoters of the subsequently formed Port Elizabeth Jetty Company were also involved in the steam navigation company. John Thornhill, initiator of the jetty project, was a director of the steam navigation company in 1838.(66) P Heugh was on the steam company's steering committee and later became chairman of the jetty company's management committee. Also amongst the promoters of both schemes was J C Chase. The jetty company's original prospectus of 1837 pointed out that the advantages of a jetty "which will arise to the Steam Navigation Company are too apparent to need comment".(67) The steamer HOPE was launched at the Clyde early in 1838 (68) and was in service by December 1838. But its useful life was as short as Port Elizabeth's first jetty. It was wrecked west of Cape St Francis in March 1840 on its way to Port Elizabeth.[69]

The immediate stimulus for a jetty at Port Elizabeth came in the form of a shipwreck. On August 10, 1837, the three-masted schooner, FEEJEE, [70] came aground at the very spot recommended for a jetty by the deputy surveyor general in 1833.[71] Ironically, the FEEJEE was
wrecked for the very reason that a jetty was wanted. Bad weather had prevented the Port Elizabeth boatmen from unloading her immediately on her arrival on July 28. An anonymous correspondent to Lloyds blamed her loss on the inactivity of the boatmen rather than on the inclement weather preventing them working. He claimed that if the FEEJEE had been efficiently handled, she would have been "half-way to Manilla" by the time the destructive storm blew up. (72)

The wreck survived the pounding surf and a local merchant, John Thornhill, realised that, if it could withstand the waves, so could a jetty. (73) He had to prove this first, however, if anyone was to be found to finance a jetty. Harbour development seemed to run in his family. His father, Christopher Thornhill, whose party of 1820 settlers had settled near the Kowie, was a keen promoter of harbour development there. (74)

Once he had realised the potential, Thornhill quickly set to work. He and a dozen Port Elizabeth businessmen clubbed together and bought the wreck of the FEEJEE for £244. Within a fortnight of the wreck they had applied to government for "the use of a Pile Engine & Double power crane for the purpose of driving piles as a foundation for jetty in Port Elizabeth from the wreck of the Bark Feejee now lying there." (75) The matter was referred to the government engineer to see if the equipment was available. A 15-metre trial platform on fourteen 11-metre piles was quickly built under Thornhill's supervision using the wreck as a base. A temporary platform was constructed by lashing spars from the wreck to its masts and rigging about 2.5 metres above the high water mark. This was then used to support the "pile engine and monkey" which was employed to build the pile-based structure independent of the wreck. Once completed the projectors proposed to link it with the shore by means of "massive chain cables". If successful, they intended requesting permission to form a joint stock company to raise enough money to begin a permanent structure. (76)

The project was largely controlled from Port Elizabeth. In October 1837 a local meeting of subscribers to the proposed jetty company elected 9 Port Elizabeth directors, along with three each from Cape
Town and Grahamstown.[77] Thornhill went to Cape Town to sound out the government on the project. On December 6 Thornhill's plans along with the estimated cost were laid before a meeting in Cape Town where it was unanimously decided to proceed with the project and form a company.(78) The Captonians, however, apparently objected to the Port Elizabeth power base and the company's prospectus reduced the number of Port Elizabeth directors to five, with four each from Cape Town and Grahamstown - only holders of at least 10 shares were eligible. The interim Port Elizabeth directors were: P Heugh, J Kemp, W Smith, J Scorey and J Thornhill. The treasurer was Daniel Phillips and the secretary W M Harries. It was proposed to raise the £6000 required to build the approximately 180-metre jetty by issuing £10 shares.(79)

The plans were submitted to, and approved by, "an Engineer of high eminence in the Colony". The Port Elizabeth Jetty Company was officially constituted in March 1838. Despite the fact that local directors were outnumbered by those from Grahamstown and Cape Town, management of the project was invested in the five Port Elizabeth directors who elected a management committee chairman. As a compromise the company's meetings were to be held in Cape Town. Initially the company was to exist for 21 years whereafter the period could be extended.(80) Although only £4000 of the estimated £6000 was pledged, the scheme forged ahead. The government responded by granting the land at the proposed site to the company. This was transferred in February 1839.(81)

Because there was a long delay in the completion of the company's trust deed, the start to construction was retarded by a year. The problem arose out of getting all the country shareholders to sign the document. By May 1839 the trust deed had been signed by the whole management committee with one exception - "as Willy Shakespeare says, "By COCK and Pye, but THIS is wondrous strange" - an obvious reference to William Cock who by this time had become heavily involved at the Kowie.(82)
Eventually in July 1839 the trust deed was finally completed. (83) Only advances from Port Elizabeth shareholders, however, made it possible for work to begin in October. Sixty of the 188 Cape Town owned shares had not been paid-up or were forfeited as a result of the £1 deposit not being paid. But the company had successfully applied to the governor for permission to use convict labour on the project. [84] By November the company had called in £3 of the proposed £10 on each of the shares. [85]

In April 1840, work was sufficiently far advanced to allow the laying of a foundation stone at the masonry section of the jetty. This occasion doubled as the 20th anniversary celebration of the landing of the British settlers. It also gave J C Chase the chance to prove statistically that the eastern Cape had infinitely more potential than the west. (86)

In August the working committee complained that Uitenhage and Grahamstown shareholders were too slow in paying their instalments which prevented it from keeping to schedule. (87) The real problem was that 228 of the 600 shares had still not been taken up. In desperation, the chairman of the company, Henry Sherman, approached the government for a loan of £1000 "on the security of the works and the future revenues of the Jetty". (88) But this was turned down because "the Government would have felt itself precluded from authorising any advance on the security of a work so liable to damage, if not destruction" let alone the fact that less than two-thirds of the shares had been taken up. In any event the Cape government had been instructed by the colonial office to use any surplus revenue to liquidate its paper money debt. (89)

By February 1841 £3300 had been spent and by mid-year it became necessary to "Appeal to the Public" for more funds. This was despite the fact the governor, after seeing the progress that had been made during a frontier visit, had recommended that the British treasury advance £500 to the company in return for the free use of the jetty for shipping government stores and troops. One of the problems was that payments on shares held on the frontier were £467 in arrears.
1st JETTY UNDER CONSTRUCTION (1840)

Eastern Province Herald 18/5/1966 p 9

PIERS PAINTING OF 1st JETTY

Cory vol II p 222
leaving the company a disposable balance of only £92. Because the amount currently subscribed was £2000 under the original estimate, a move was made to dispose of the remaining shares. Twelve of these were taken up at a meeting held in Port Elizabeth on June 21. A visitor from Cape Town, Captain George Robb, took another. In addition steps were taken to enforce the arrear payments. Residents in the vicinity were circularised as to how little money was still needed to complete the project. They were encouraged to take up the remaining disposable shares.[90]

Because of the financial straitjacket the company found itself in, the original plan was extensively pruned. Warehouses, a tramway and an extra 30 metres of jetty to accommodate steamers, were all sacrificed.[91] The jetty was eventually to be six metres wide and 208 metres long - 146 metres of wood and a 62-metre stone abutment covered with wooden decking. These financial problems aside, by July 1841 ship's boats were already using the jetty to land and ship supplies. The decking was completed to near the old 1837 work.[92] It was found that the trial piles had been attacked by worms. Scupper nails prevented the same thing happening to the piles driven since October 1839.[93] From January 1842, the jetty company implemented charges for ship's boats using the jetty.[94]

The shareholders were asked to pay their final instalment by August 18, 1842, or forfeit their shares.[95] Eventually, on March 22, 1843, the company officially began shipping cargo with a record 17 ships lying at anchor in the roadstead. Six had come from London and seven were loading for there.[96] At the same time the first vessel was repaired off the jetty. The work was completed in 5¼ hours by the Isemonger brothers for £60 on the "no cure no pay" principle.[97] The 250 ton brig, VANGUARD, had put into Algoa Bay with a dangerous leak which "was effectively repaired with ease, dispatch, and without the smallest accident, and the vessel is now receiving back her cargo from off the jetty".[98]
ANOTHER VIEW OF 1st JETTY (1840)

LANDING PLACE (1840)
1837-43 EARLY HARBOUR DEVELOPMENT

1st JETTY ILLUSTRATED IN CHASE (1843)

Chase (1843) p 56

PORT ELIZABETH FROM THE SEA (1843)

Illustrated London News 24/6/1843
The whole enterprise was given official recognition when the jetty was declared a legal landing place by the customs department from March 30. The local customs official, D P Francis, pointed out, however, that there was "no chance at present of this Jetty superceding the greater portion of work, which must still be carried on at the beach". He therefore requested extra manpower. Captain E H Salmond was the first local businessman to exploit the real potential of the jetty when he procured a five-ton sailing boat from Cape Town to work between the jetty and the ships at anchor.

The jetty company's directors were: engineer - John Thornhill, managers - Pieter Heugh, J Blackburn, William Smith and J C Chase; secretary - John Bailie.

Destruction of the first jetty: 1843

The full working of the jetty was short-lived. It was destroyed in a gale five months after officially coming into operation. On August 26, 1843, three ships were driven through it:

Friday night the gale increased until it raged to an extent that had not been witnessed since 1835. The night was truly terrific! So extreme was the darkness that no object could be distinguished except in the momentary glare of the lightning, while the roaring of the tremendous surf and the howling of the wind was perfectly deafning (sic)... At about 4 o'clock the Brig ELIZABETH ROWELL came, stern on, about the centre of the Jetty, through which in a very few minutes she made a complete breach, carrying away the decking of the Jetty upon her quarter deck. The crash and concussion were tremendous, but the crew of the Brig contrived to land in safety upon the Jetty... Within a quarter of an hour afterwards the unfortunate LAURA...came foul of the outer part of the Jetty which was still standing - on which a part of the crew scrambled, but the joy of these poor fellows at their escape was doomed to be of short duration, for the SEA GULL...now dashed against the same part of the Jetty, carrying everything away and sweeping
off the men who had taken refuge there who were hurried into the raging surf and never more seen... When day broke the beach presented an awful sight... The largest and most valuable half of the jetty has been destroyed, and the whole structure rendered useless.

Eleven lives were lost and total damage, including the ships, was estimated at £30000.\(^{(103)}\) It should be noted that eight other vessels in the roadstead managed to ride out the storm. The Kowie, however, took the opportunity to point out that no damage had been done to its harbour works by the same gale.\(^{(104)}\)

Ironically John Thornhill was on board the steamer PHOENIX when it arrived at Port Elizabeth a week after the disastrous storm.\(^{(105)}\) He had sold up his business and moved to Cape Town when the jetty had neared completion. His premises were taken over by the Mosenthal brothers who had just set up business in the eastern Cape.\(^{(106)}\)

The wrecked jetty, however, proved to be useful during heavy seas in March 1844. The MARY was driven ashore alongside it and her "crew were enabled to step out of her".\(^{(107)}\) By then the Port Elizabeth Jetty Company had been wound up. The government allowed it to sell its land and the remains of the jetty by public auction on March 9, 1844.\(^{(108)}\) The land was subdivided into 12 lots of which 11 were successfully sold and offset the company's losses by £920.\(^{(109)}\) The jetty had cost its promoters £6000. Some shareholders lost as much as £150 each.\(^{(110)}\)

To a minor extent nature rectified its injustice to Port Elizabeth by allowing the ABBOTSFORD to come "quietly on shore" at the landing place in October 1843.\(^{(111)}\) The wreck was then used as a temporary landing stage.\(^{(112)}\)
4.4 J O SMITH'S DWARF JETTY: 1844-50

After the first jetty was destroyed in 1843 Cory suggests that Port Elizabeth remained "jettyless until in after years the work could be undertaken on a much larger scale". (113) Within a year, however, another one was under construction. It belonged to J O Smith, a local merchant who operated his own boating concern. By October 1844 his jetty was sufficiently far advanced for a Port Elizabeth correspondent to the Graham's Town Journal to observe: (114)

Mr Montagu galloped in and out again, scarcely stopping an hour here. I think he might have bestowed a little more time upon us. The only objects which seemed to engage his attention were J O Smith's private Railway and Dwarf Jetty, which are making good progress.

As the secretary to government, John Montagu (1843-52), had just come from an inspection of the Kowie harbour works, his flying visit was not appreciated in Port Elizabeth. (115) A disgruntled "Bayonian" noted: (116)

Beyond what may have passed at the works of Mr. Smith - he held no communication with any one... In fact made no inquiries touching the character and prospects of the most important spot in the Colony - not the Liverpool, but the New York of the Cape.

There is no record of J O Smith obtaining official permission to build his jetty. (117) But in March 1844 he did apply to the lieutenant governor for permission "to lay down an Iron Railway from his Stores to the Sea". (118) One of the subsequent reports on the matter commissioned by the lieutenant governor referred to the: "Railway from Stores near Jetty to the Sea at Port Elizabeth". (119) This suggests that the jetty was built before the railway was laid.

The success or failure of this jetty is unknown. It would seem that it was eventually abandoned. A probable reason was silting. The harbour master from 1845 to 1847, Lt W P Jamison, touched on the
problem while giving evidence to the legislative council committee on Algoa Bay in January 1852:(120)

I remember that the jetty then called John Owen Smith's, which is a pile jetty, that in one day, I could ride on horseback underneath the jetty, and about twenty-four hours afterwards, I could barely crawl through on hands and knees, from it being so blocked with sand. I should add, the length of jetty to which I refer only extended to half tide.

At the same hearing the jetty was also referred to as J O Smith's by the chief government civil engineer, Captain George Pilkington, who felt that Jamison's opinion on the silting problem was not fully correct as the whole Port Elizabeth coastline was subject to periodic silting.(121)

The jetty must be the one featured on Essenhigh's 1849 map of Port Elizabeth.(122) But its usefulness by then had already been outlived because in the same year J O Smith applied "for an extension to the plot of ground he has been allowed to occupy on the beach at Port Elizabeth to build a Jetty". (123) The request, however, was turned down because of possible interference with a public jetty the chief civil engineer was about to propose.(124)

The only clue to the utility of J O Smith's jetty was a passing reference given by Alfred Jarvis in 1855. While giving evidence on the proposed breakwater to the harbour board, he mentioned that he had seen two jetties built at Port Elizabeth and "both were failures". (125) Thereafter all reference to this first private jetty disappears. It is not shown on Warren's 1859 plan of the breakwater scheme whereas the Port Elizabeth Boating Company's dwarf jetty is. (126) The company's jetty was started off Fleming Street in 1857 and extended at the end of 1858. (127) Although the Eastern Province Boating Company intended building a jetty in 1858, it was never constructed. (128) The PE Boating Company could not have taken over
ESSENHIGH'S PLAN OF PORT ELIZABETH (1849)

PE Harbour Engineer's Office (FEH.51.V.801), PE Public Library
J O Smith's jetty as their's was 60 metres south of the first jetty while his was 165 metres.[129]

To complicate the issue, most historians confuse J O Smith's jetty with the one that was destroyed in 1843. Croft and ffolliot's One Titan at a Time incorrectly dates the destruction at 1847 which allows the 1844 Montagu visit to be associated with the earlier jetty.[130]

Jetties featured in paintings of Port Elizabeth after 1843 seem to be attributed to artistic licence. Butler's 1820 Settlers contains a picture painted by Baines in 1848. Yet it is used to illustrate the first jetty.[131] It clearly shows a set of rails and a crane which do not appear in known pictures of the first jetty.[132] In contrast later pictures usually feature rolling stock and a crane which conform with known facts of J O Smith's dwarf jetty and railway.[133]

The actual date J O Smith's jetty was constructed is complicated by the following which is dated March 27, 1846:(134)

PORT ELIZABETH.- The Frontier Times [135] of the 17th inst. contains the following:- Mr. J.0. Smith, who has lately returned to this colony from England intends, as we understand, to run out a jetty at that place at his own expense, and to supply the shipping with water, to be forced by a steam engine through pipes laid along the jetty for the purpose, for which he has brought with him all the necessary apparatus.

There is no reference, however, to this development in the Eastern Province Herald during 1846. The accuracy of the report must be doubted because J O Smith returned from his only trip to England during his 42 years at the Cape in January 1844 on board the BROMLEY.[136] In addition, a watercolour in the Port Elizabeth art gallery, dated 1845, has "J.O. Smith's new jetty" pencilled-in above the jetty near the wreck of the ABBOTSFORD.[137]
WATERCOLOUR SHOWING J O SMITH'S DWARF JETTY (1845)

King George VI Art Gallery, Port Elizabeth Public Library
LITHOGRAPH BASED ON 1848 BAINES SKETCH OF DWARF JETTY (1866)

Illustrated London News 13/1/1866, Aldridge (1983) No 169
The later date for the start of the jetty is also unlikely as a year after the alleged intention of building it and installing a steam pump for water, the following appeared in the Herald:\(^{(138)}\)

"Among the improvements, public and private, which are at present going forward in this place, we are glad to observe that a well is being at present sunk near the beach by Mr. J.O. Smith, in order to furnish the shipping with less impure and fresher water...he has been encouraged in this project by the Colonial Government, who have granted to him a site for the well, and for the laying down of pipes, &c. on like conditions to those on which other erections have been permitted on the beach, and therefore he seems prepared to go to considerable expense in order to have proper watering arrangements and auxiliary arrangements which should be first provided before we advance to greater and more problematical undertakings."

The water scheme dates back to April 1846 when J O Smith applied to government for permission to "occupy or purchase a piece of land at the Landing place at Port Elizabeth for laying down water pipes".\(^{(139)}\) Although the matter was referred to the surveyor general, nothing happened and he reapplied in August.\(^{(140)}\) By November he had submitted "a sketch shewing the site of the well he intends digging".\(^{(141)}\) But it was only in December that the government secretary informed him that permission, subject to certain conditions, had been granted.\(^{(142)}\)

Thus the Cape Frontier Times report must have incorrectly condensed the time period involved. J O Smith had in fact returned from England two years previously with the intention of building a jetty. In 1846 he intended only to extend the project by laying on water. Alternatively, he might have found his first jetty inadequate and intended building a new one at the same time as laying on water. But this is unlikely as he only applied for permission to build a new jetty three years after improving his watering facilities.
J O Smith's link to harbour development went back to the early 1830s when he established himself as a Port Elizabeth trader. By 1834 he was an agent to the agent to Lloyd's. In September 1836 he was commissioned to erect a flagpole for the port authorities. It was to replace the one reclaimed by Captain James Scorey who had lent it to the port captain in 1829. J O Smith's tender was £13 10s for the pole and £3 15s for a Union Jack - the port office not having one.

As J O Smith's trading empire expanded in the 1830s, he became directly involved with the handling of goods being shipped through Port Elizabeth. By 1840 he operated one of Port Elizabeth's three boating establishments. His boating operation must have been the prime motivation behind the construction of his own jetty in 1844. In December 1844 he requested "to be allowed to lay down moorings for one or two vessels in Algoa Bay". But the matter was referred to the harbour master for a full report. He was on board the Cape's first steamship when it sank in March 1840. The steamer HOPE, which started service between Cape Town and Port Elizabeth in December 1838, was wrecked west of Cape St Francis in March 1840. J O Smith and the other passengers on board at the time managed to get safely ashore.

The development of boating companies in the 1840s and the further expansion of J O Smith's business empire must have put an end to his boating establishment and thus the need for a private jetty. In 1847 he was involved in the establishment of the Eastern Province Boating Company. He was elected one of its first directors at a meeting held at his store on May 10. In September of the same year J O Smith declined a seat on the legislative council because he was about to depart for the east on business. At the end of the year he resigned as a director of the EP Boating company.

J O Smith's involvement in the exploitation of the Namaqualand copperfield in the early 1850s must have dealt the final blow to his interest in a private jetty. By 1854 he was the lessee of seven different mineral rights in Namaqualand, while his son-in-law,
W A HARRIES PAINTING OF PORT ELIZABETH (1851)


BAINES SKETCH OF BEACHFRONT (1853)

Oppenheimer Collection, Cory Library for Historical Research
Meanwhile his interest in harbour development had also waned. He was the only prominent Port Elizabeth businessman who declined to give evidence to the harbour board on improvements in 1855. (155) After his permanent return to England in 1861, however, his knowledge of Port Elizabeth conditions was put to good use. He was commissioned to select the steam tug **ST CROIX** by the Algoa Bay Landing and Shipping Company in 1865. (156)

Whatever actually happened to J O Smith's jetty is not crucial because the future of Port Elizabeth harbour development passed from private to public enterprise with the issuing of "An Ordinance for Improving the Ports, Harbours, and Roadsteads of this Colony" at the end of 1847. (157)
FOOTNOTES:

1. Soonike (undated) pp 52-54
2. 1179kg = 26 cwt
3. CO 150 No 9 12/4/1820 - TB dep PC to govt sec
4. Moreby report (1820): GG 15/7/1820 vol XV No 757, RCC vol XIII pp 186-93
5. Ibid
7. Soonike (undated) p 56. This probably was the WINIFRED - RCC vol XXII p 205 - 24/2/1822 Evatt to govt sec.
8. CO 198 No 30 24/3/1823 - Evatt to govt sec
9. CO 211 No 77 26/5/1824 Barry to gov. See also CO 220 No 47 4/5/1824 - Evatt to govt sec.
10. CO 240 No 9 6/4/1825 TB dep PC to govt sec; also enclosure 4/4/1825 Smith to TB dep PC
11. CO 245 No 99 12/7/1825 - Evatt to govt sec; CO 3929 No 683 July 1825 - memorial from 41 Uitenhage inhabitants; RCC vol XXII pp 416-18 - 30/7/1825 gov to colonial secretary, 12/7/1825 Evatt to govt sec. Cory dates this as 1824 - Cory vol II p 208.
12. RCC vol XX p 402 - 31/3/1825 gov to colonial secretary
13. RCC vol XXIII p 428 - 12/11/1825 colonial secretary to gov, Cory vol II p 208
15. CO 284 No 50 8/8/1826 - Dunn to govt sec. See also CO 284 No 38 23/5/1826 - Dunn to lt gov: Dunn refers to articles on the need for a wharf he had published under a pseudonym in Bridekirk's Chronicle.
16. The HEWORTH had gone aground in March 1823.
17. From this quote it appears that Soonike is mistaken to believe that Dunn proposed to use the wreck as the base for a jetty. See Soonike (undated) pp 94-95
19. RCC vol XXXV p 286
21. RCC vol XXIV p 52 - 2/12/1825 Francis to Hay
22. RCC vol XXXV p 285
23. Cooper (1930) p 339, M164 19/8/1836 - PEHM to UCC, M164 2/9/1836 - govt sec to UCC
24. Sometimes spelt Weis or Weiss.
25. CA (1833) p 183, Looking Back vol 19 pp 57-58
26. Pringle (1835) p 21
27. RCC vol XIV p 435
29. Original Griffin Hawkins list in PEPL.
30. In January 1839 the executors of the Weyes estate put up for sale: 29 building lots, 3 other properties, a 6,5 hectare smallholding on the Baakens and a 1013 hectare farm, Doorn Nek, near the Zuurberg - G3J 3/1/1839 p 1. The Baakens property was known as Fortuins Valley - G3J 26/3/1840 p 1. As late as 1890 his executors became involved in a legal wrangle over land reclaimed along the Victoria Quay, adjacent to Weyes land - PEPL Weyes file.
31. GTJ 27/1/1832 p 17, 2/3/1832 p 40
32. Wallace, a master mariner from London, first arrived at Table Bay in 1818 having just been granted a licence to trade with St Helena. By 1821 he was pilot at Knysna and by 1825 harbour master at Port Frances. In September 1831 he took up the same post in Port Elizabeth - Philip (1981) p 443. Philip dates the Knysna appointment as 1820 but the 1824 civil establishment list gives it as 15/6/1821 with a salary of R$800 - RCC vol XIX p 70. The 1827 list gives his appointment as harbour master at Port Frances as 1/10/1825 - RCC vol XXXV p 73
33. GTJ 2/3/1832 p 40
34. GTJ 9/3/1832 p 42
35. ibid
36. GTJ 16/3/1832 p 46
37. ibid
38. CO 8/6/1832 p 393 - govt sec to Korsten. Korsten was given this illustrious title by his son-in-law, J C Chase - Chase (1868): pamphlet's subtitle.
39. CO 5729 sch 216 No 30 8/3/1832 - Korsten to govt sec
40. GTJ 4/5/1832 p 74
41. GTJ 27/4/1832 p 69
42. CO 5302 8/6/1832 p 393 - govt sec to Korsten
43. CO 403 No 70 5/6/1832 - surveyor general & govt architect to govt sec
44. CO 5302 8/6/1832 p 393 - govt sec to Korsten
45. CO 403 No 81 4/7/1832 - surveyor general & govt architect to govt sec
46. CO 5302 4/9/1832 p 411 - govt sec to Chase, GTJ 22/11/1832 p 183
47. CO 5476 pp 109-10 - governor's 1832 report, section 11: public works
48. CO 5302 19/4/1833 p 466 - actg govt sec to Chase
49. CO 5302 18/4/1833 p 465 - actg govt sec to Korsten
50. CO 4903 19/4/1833 p 317 - actg govt sec to asst surveyor general
51. GTJ 23/5/1833 p 2
52. CO 5303 30/8/1833 p 5 - actg govt sec to jetty committee
53. There is no record of the Hertzog plan in the Cape Archives.
54. CO 4904 13/11/1833 p 125 - actg govt sec to civil engineer
55. GTJ 29/5/1834 p 2, 17/7/1834 p 2, 18/9/1834 p 2
56. A correspondent to GTJ claimed that there were 10 changes in colonial office administrators during this period - GTJ 25/11/1841 p 2. There were, however, in fact five secretaries of state for war and colonies from 1833-35 - four in the second year alone:
--- Mar 1833 to Jun 1834 - Viscount Stanley (later Earl of Derby)
--- Jun 1834 to Nov 1834 - Thomas Spring Rice (later Lord Monteagle)
--- Nov 1834 to Dec 1834 - the Duke of Wellington
--- Dec 1834 to Apr 1835 - the Earl of Aberdeen
--- Apr 1835 to Feb 1839 - Charles Grant (Lord Glenelg, May 1835)
A political crisis had arisen from William IV's opposition to the Reform Bill. This resulted in a clash with his prime minister, Lord Grey (1830-34), who eventually resigned. He dismissed Grey's replacement, Lord Melbourne, in November 1834 after only 6 months in office. The Duke of Wellington provisionally ran the various ministries until Sir Robert Peel assumed office in December. Despite losing the next election, the king
re-appointed him. But his minority government did not last and he was forced to resign in April 1835. He was replaced by Melbourne who held office until 1841 - Woodward (1962) pp 101-2, 660-62. Also De Kiewiet (1941) p 28

58. Leverton (1958) p 349
60. GTJ 11/12/1834 p 4
61. DSAB vol II pp 205-7, vol III pp 163-5
62. GG 15/7/1836
63. For a detailed account see Turpin (1964).
64. See section on Mfengu & beach labour in Landing & Shipping.
65. GTJ 30/6/1836 p 2 and Murray (1933) p 12
66. Morse Jones (1971) p 162
67. CO 424 No 109 4/12/1837 enclosure - "Mem of Prospectus"
68. GTJ 30/8/1838 p 2
69. GTJ 19/3/1840 p 2. One of the passengers on board the HOPE when it went aground was the merchant J O Smith - GTJ 26/3/1840 p 2.
70. Also spelt FEEGEE. The British registered FEEJEE, 171 tons, under H Stewart arrived from Table Bay with a cargo of sundries on July 28, 1837 - PEPL Algoa Bay Arrival Book.
71. GTJ 24/8/1837 p 4, 19/10/1837 p 2. In 1843, however, the collector of customs, W Field, reported that "the site of the Jetty was fixed upon by mere chance, namely, the wreck of a Vessel (the "Fejee") having been driven on shore there... All the persons I have conversed with on the subject have concurred in stating to me, that, were it not for this accidental circumstance of the wreck, the site is one which would never have been chosen for a Jetty, or landing place, - and, experience has now proved how very unfit such a site was for that purpose." - CO 517 No 129 24/10/1843 - CTCC to govt sec
72. GTJ 19/7/1838 p 3
73. The first Port Elizabeth reference to Thornhill is September 1836 when he advertised American cargo for sale at his stores. He was appointed Port Elizabeth agent for the United States consul in GG 2/9/1836 - GTJ 15/9/1836 pp 1 & 2.
75. CO 4330 No 833 26/8/1837 - Thornhill & others to govt sec
76. GTJ 19/10/1837 p 2, 1/8/1839 p 2, 2/4/1840 p 3
77. GTJ 23/11/1837 p 1 - the PE Jetty Company directors were:
   Port Elizabeth - J Blackburn, W Smith, J C Chase, J Scorey, P Heugh, J Thornhill, J Kemp, D Phillips and W M Harries
   Cape Town - C S Pillans, E Norton and F Still
   Grahamstown - E L Kift, C Maynard and W R Thompson
78. CO 424 No 109 4/12/1837 - Thornhill, Jerram & Thompson to govt sec, GTJ 2/4/1840 p 3 - report of the PE jetty company directors, GTJ 24/6/1841 p 3
79. CO 424 No 109 enclosure - "Mem of Prospectus"
80. PE jetty company prospectus (1838)
81. Uncatalogued PEHB deeds, number 20 - PEPL
82. GTJ 12/6/1839 p 3 - letter from "A Humble Committee Man"
83. GTJ 2/4/1840 p 3
84. Ibid - directors report dated 31/12/1839. At the end of 1839 the following directors went out of office by rotation but were eligible for re-election: T Ansdell, R Daniels and J C Chase. There were also vacancies resulting from the resignation of Gadney and Pillans, W R Thompson having left the colony and W Cock never having qualified to be a director. It was decided to elect six directors to fill these vacancies for 1840. As there were no auditors, two were to be appointed.

85. GTJ 28/11/1839 p 4 - a listing of Cape joint stock companies gives the PE Jetty Company 600 shares with a nominal value of £10 each of which £3 were paid-up:

i. A £1 deposit per share was initially required and called-in from July 1838. George Britton was the company's honorary secretary and D Phillips, the treasurer - GTJ 19/7/1838 p 1, 16/8/1838 p 4.

ii. Although the second instalment of £2 was first advertised in August 1839, it was still being advertised in November - GTJ 14/11/1839 p 1.

iii. The third £2 instalment was due on January 27, 1840, but still being advertised in April - GTJ 16/4/1840 p 4.

iv. The fourth instalment of £2 10s became due on November 15, 1840 - GTJ 28/11/1840 p 1.

v. Shareholders were required to pay-up in full before August 15, 1842, otherwise their shares would be forfeited and resold. This would have been £2 10s to make up the full £10 - GTJ 14/7/1842 p 3.

86. GTJ 30/4/1840 pp 2-3
87. GTJ 6/8/1840 p 2
88. CO 424 No 174 27/9/1840 - jetty company chairman to govt sec
89. CO 5305 28/9/1840 p 69 - govt sec to jetty company
90. GTJ 24/6/1841, 1/7/1841 p 1. The meeting was chaired by the chairman of the jetty company's committee of management, Pieter Heugh. Movers and seconders of motions were: A B Scheuble, G Hauptfleisch, W M Harries, Higgins, D Phillips, G Chick, W Smith and J C Chase.
91. GTJ 11/4/1840 pp 2-3, 24/6/1841 p 3
92. GTJ 1/7/1841 p 2
93. GTJ 24/6/1841 p 3. Yellow wood piles were used in the first jetty, some of which came from Plettenberg Bay. The PE Jetty Company called for tenders for 85 cubic metres of yellow wood to be submitted by the end of August 1839 - GTJ 8/8/1839. The purchaser of the jetty remains in 1843, Captain E H Salmond, recommended yellow wood for use in the 1855 scheme because he had found that even the yellow wood piles unprotected by scupper nails had been in good condition - EPH 19/6/1855 p 3.
94. GTJ 6/1/1842 p 1 - the charge for ship's boats using the jetty ranged from £1 a month for vessels of up to 100 tons to £2 for vessels over 300 tons. The monthly tariff was the minimum charge.
95. GTJ 14/7/1842 p 3
96. GTJ 16/3/1843 p 2, 30/3/1843 p 3
97. GTJ 13/4/1843 p 3
98. GTJ 30/3/1843 p 3 - letter from J C Chase
99. GTJ 13/4/1843 p 3. The company applied to the collector of
custom on March 21 for the jetty to be made an official landing
place. The collector reported favourably to government on March
24 - CO 517 No 39 31/3/1843 - CTCC to govt sec; enclosures
21/3/1843 - jetty company secretary (John Bailie) to PESC,
24/3/1843 - PESC to CTCC
100. GTJ 13/4/1843 p 3, 30/3/1843 p 3
101. CA (1843) - list of Port Elizabeth companies
102. GTJ 31/8/1843 p 2
103. ibid, GTJ 26/9/1844 p 3 - letter from W Lloyd
104. GTJ 31/8/1843 p 2
105. ibid p 4
106. GTJ 17/11/1842 p 1, 12/5/1843 p 1, Fleischer (1983) p 61
107. GTJ 7/3/1844 p 4
108. CO 517 No 129 24/10/1843 - CTCC to govt sec, CO 5306 24/11/1843
p 226 - govt sec to jetty company chairman (Thomas Ansdel), GTJ
15/1/1844 p 1, 12/9/1844 p 3
109. GTJ 14/3/1844 p 4, uncatalogued PEHB Deeds, No 19 & 20 - PEPL.
The jetty ran out from lots 4 and 6, these and lot 2 were
transferred to E H Salmond in October 1846. While giving
evidence to the PE harbour board in 1855, Salmond mentioned that
he had bought the remains of the jetty - EPH 19/6/1855 p 3.
110. GTJ 12/9/1844 p 3
111. GTJ 26/10/1843 p 2
112. EPH 3/7/1855 p 3 - mentioned by the acting harbour master,
Captain G Wilson, while giving evidence to PEHB in 1855.
113. Cory vol IV p 256
114. GTJ 17/10/1844 p 4
115. ibid p 3
116. GTJ 31/10/1844 p 3
117. In the CO archive there is no general index and summary of
letters received from private individuals during 1844/45 - CO
2478. No actual letters exist after 1826 - CO 293 being the
last.
118. LG 544 No 1322 13/3/1844 - J O Smith to It gov
119. LG 541 No 1322 4/4/1844 Charles Bell's report
120. PEHB-govt correspondence (1854) p 5
121. ibid, p 6
122. "Plan of the Town of Port Elizabeth" by R Essenhigh, 1849,
PEH.51.V.801, PE Harbour Engineers Office
123. CO 2483 S 10/5/1849 - J O Smith to govt sec
124. CO 5310 p 305 28/5/1849 - govt sec to J O Smith
125. EPH 29/5/1855 p 3
126. "Plan of the Proposed Breakwater" by A G Warren, 1859,
PEH.51.V.802, PE Harbour Engineers Office
127. EPH 27/10/1857 p 2, 15/10/1858 p 3, 17/12/1858 p 2
128. EPH 17/12/1858 p 2
129. Essenhigh map (1849), Warren plan (1859), undated Cory Library
Map No 55 - probably a copy of the sketch referred to in CO 2480
S107 28/11/1846. See J O Smith's well scheme for detail.
130. ffolliot (1960) pp 74-5. The incorrect date of 1847 creeps in
through a misquote from Ward (1848) p 57.
131. Butler (1974) p 316. The date of destruction is also incorrectly given as 1847. From Baines's own description of the surfboat scene in 1848, it would appear he mistook the dwarf jetty for the one "recently much damaged by a vessel that had been driven against it during a severe gale from the south-east" - Kennedy (1961) p 18.

132. Pictures of Port Elizabeth dated before 1843 show very similar jetties - see illustrations of 1st jetty.

133. eg Butler's 1848 Baines sketch, p 316, a Baines sketch of 1853 and a W A Harries painting done before the abortive breakwater scheme. The Harries painting is reproduced in Fleischer (1963) between pp 170/171. But part of the caption reads: "on the shore, the ill-fated jetty". In addition it was "thought to have been painted shortly before 1860". Lithographs of this painting, however, were on sale in Port Elizabeth as early as 1851 for the very moderate charge of 10s 6d. Its accuracy was vouched for: "Even the most critical eye can detect no graver error than a trifling difference in the height of a roof" - PET 7/8/1851 pp 1 & 2.

134. Cape of Good Hope & Port Natal Shipping & Mercantile Gazette 27/3/1846 p 2

135. Cape Frontier Times

136. GTJ 25/1/1844 p 4. The fact that he had only been back to England once was specifically mentioned on his permanent departure back to England in June 1861 - EPH 14/6/1861 p 2.

137. It is reproduced in Lorimer (1971) pp 52-3. Although captioned "a watercolour in the Port Elizabeth Museum, c. 1840-45", the original, now in the King George VI art gallery, is definitely dated 1845. Lorimer's backdating to 1840 must have been to link the picture to the first jetty.

138. EPH 6/3/1847 p 2

139. CO 2480 S444 17/4/1846 - J O Smith to govt sec

140. CO 2480 S82 25/8/1846

141. CO 2480 S107 28/11/1846

142. CO 5308 p 385 24/12/1846 - govt sec to J O Smith

143. J O Smith had established a business in Port Elizabeth by February 1830 - EPH 3/10/1871 p 4 - obituary; GTJ 5/10/1832 p 155, 17/10/1833 p 1.

144. GTJ 1/5/1834 p 3. J O Smith was presumably the Port Elizabeth agent for Lloyds's agent in Cape Town.

145. Cooper (1930), p 339; M164 19/8/1836 - PEHM to UCC; M164 2/9/1836 - govt sec to UCC

146. GTJ 9/7/1840 p 2 - see section on Boating companies in Landing & Shipping for more detail.

147. CO 4335 No 597 27/12/1844 - J O Smith memorial

148. GTJ 19/3/1840 p 2

149. GTJ 26/3/1840 p 2

150. EPH 8/5/1847 p 1, 15/5/1847 p 1

151. Le Cordeur (1981) p 196

152. EPH 11/12/1847 p 1
153. J O Smith fitted out his JESSIE SMITH to transport supplies and equipment to the copperfields but it was wrecked off the Namaqualand coast. He managed to get safely ashore - EPN 9/8/1853 p 3, 23/8/1853 p 4, 20/9/1853 p 2. Undaunted, he had the schooner SHRIMP built in Port Elizabeth by Captain Dawson to replace her - EPH 7/2/1854 p 3, 21/2/1854 p 2, 28/11/1854 p 2, 26/6/1855 p 2. In addition he imported a 7.5kW steam launch to operate on the Orange River. But he discovered after it was launched that nothing larger than a rowing boat could cross the bar at the Orange River mouth. The escapade did, however, probably inspire Jules Verne to write one of his lesser known works, Meridiana, which is the story of the successful journey up the Orange River in a steamer by six astronomers - Green (1969) pp 54-6. His mining experience was equally disastrous: "The depth to which Mr. Smith...has penetrated at the Koedas (sic) mines without meeting with any considerable returns, is proving a warning to other companies" - EPH 25/12/1855 p 2.

155. EPH 5/6/1855 p 3
156. PET 16/2/1866 p 3 - see section on Boating companies in Landing & Shipping.
157. CO 5837 29/12/1847 - Ordinance No 21
5. PLANS
5. PLANS: 1845-55

5.1 LLOYD SCHEME: 1845

On one of his visits to Port Elizabeth, the secretary to government, John Montagu (1843-52), invited the resident magistrate, Captain William Lloyd, to draw up plans for a harbour. Lloyd submitted his plan to the colonial government in January 1845. Lloyd had served with the Royal Navy in the Mediterranean during the Napoleonic Wars. It had always struck him that a mole such as the one in the Bay of Algiers would be ideally suited to Port Elizabeth. There was, however, no response to his plan from Cape Town.

Tired of waiting, Lloyd wrote an open letter to the merchants of Port Elizabeth in December 1845 outlining his plan and inviting them to inspect it at the Commercial Hall. He envisaged a 1400-metre stone breakwater on the reef that ran out from the south side of the Baakens. There would be 4 metres of water within 45 metres of the shore. Further out the depth increased to 9 metres:

this will form a capacious basin, perfectly land-locked, making a safe anchorage for forty sail of various class of shipping, including even large Indiamen or Line-of-Battle ships.

The facilities for carrying out this useful work are at hand. There is sufficient stone on the hill adjoining the beach, which may be quarried on the spot and run out in wagons on a railway - on an inclined plane - to the extreme end of the Mole, the loaded wagons bringing the light ones back to the quarry, thus saving all expense of horses or oxen, and leaving the manual labor to the quarrying, loading, and unloading the stone. There will be no occasion for the employment of boats, as the chain of connection will be uninterrupted from the quarry to the extreme end of the work; the necessity of employing vessels in works of this kind (unconnected with the shore) has ever formed one of the most expensive items in their construction.
However, John Parkin, who had built one of the 1832 models, felt that Lloyd's plan was virtually identical to the one he had proposed 15 years previously. (6) But this was disputed by Lloyd who claimed he had not known that Parkin "had dabbled in breakwaters". (7) The two buried the hatchet in the common cause: "whether the plan be the progeny of the fertile brain of the Dey of Algiers, Mr. Lloyd, or John Parkin, is the matter of very little consequence, provided it meets the necessities of our Bay". [8]

At a time when Port Elizabeth was expecting a better deal from government, a controversy arose out of the secretary to government's handling of the appointment of the new harbour master, Lieutenant W P Jamison (1845-47). [9] On the death of his predecessor, R G Dunster-ville (1835-45), the post had apparently been promised by Montagu to a recommended local man, T W Gubb. [10] Gubb was appointed acting harbour master but Montagu then apparently changed his mind and appointed Jamison who was a serving naval officer. Gubb was then told to wait and see if Lt Jamison's resignation from the Royal Navy was accepted before he could be appointed to a permanent post. (11) Jamison, however, took up his duties on November 16, 1845. (12) The whole affair was seen as another example of government overriding local wishes. [13]

Meanwhile the Cape's financial position steadily improved and two decades of debt was liquidated. From 1844, for the first time, a substantial surplus became available. Thus there was renewed interest in securing government finance for port facilities, but, once again Cape Town was to get the lion's share. At great expense, the colonial government decided to make Table Bay a harbour of refuge. (14) Naturally this would prevent government involvement at Port Elizabeth. Locals pointed out that Port Elizabeth was actually in a better geographic position and it would cost a quarter the amount to convert the port than it would to construct a breakwater at Cape Town. (15)
The 7th Frontier War (1846-47) once again reminded the authorities of Port Elizabeth's distance from the troublesome frontier. Thus attempts were made to land at Waterloo Bay. Although dangerous, these proved to be successful, cutting the overland distance to the frontier by 160 kilometres and shortening troop travelling time by several weeks. Despite the potential of a rival port, the trading prospects for Port Elizabeth were immediately seen: "Port Elizabeth seems destined to become the great mart for the produce of Kafirland, and we doubt not but that its merchants will soon avail themselves of the advantages of their position." (16)

Cape Town's supposed unfair share of Cape expenditure was still seen as the major factor inhibiting Port Elizabeth's development. Despite the outrage expressed in the eastern Cape at the thought of a breakwater in Cape Town, the idea was hardly new. A commission to investigate the matter had been appointed as early as 1836. The present proposal stemmed from the report of a commission appointed by the governor in June 1844 "to report upon the practicability, utility, and advantages of such a work". (17)

The secretary of state's reply to the report was received in Cape Town in July 1846. There was to be no British government financial aid. Thus the colonial government proposed to raise £300 000 which was to be guaranteed by Britain. (18) This development was greeted with derision in the Eastern Province: (19)

The measure of course will pass the Council, the majority of members...are interested in the work as owners of landed property... Let the means be distributed fairly, give all bays a fair chance, and don't rob Peter to aggrandize Paul.

As a result a public meeting was held in Port Elizabeth on September 14 to discuss the matter. A number of resolutions were passed and the following points submitted to the governor as a memorial: [20]
1. That it was hoped that the Cape Town breakwater was the "first of a series of general improvements to all the Harbors in the Colony."

2. That "the sum of £400000 originally proposed...to be raised by the redemption of quit-rents, and surplus revenue as well as by debentures, will now become applicable to the improvement of the other Harbours."

3. That "while large sums of money have been expended by private individuals in this Bay and other inlets on the Eastern Coast in attempts at improvement, nothing whatever has been effected by Government."

4. That "Algoa Bay is the only real Harbour of Refuge attainable in Westerly gales".

5. "That the construction of a Mole or Breakwater in Algoa bay for the protection of Shipping from Southeasterly gales would complete the object of rendering the Harbours of this colony available as places of security".

6. That a commission of not less than five be appointed to "examine and enquire on the spot into the practicability and estimated cost of erecting a Jetty or Mole or Breakwater, and laying down Moorings in Algoa Bay."

The meeting also resolved that "should the prosecution of the projected Breakwater in Table Bay interfere with the early commencement of similar improvements in Algoa Bay, a Representation should be made to the Home Government praying that the respective claims of the two Bays for so national an object as a Harbour of Refuge be duly weighed before any work of magnitude be begun."(21)

But the governor would not "make any specific promises respecting the application of public resources to the construction of works at Port Elizabeth". The port, however, would not be overlooked "when a general measure is adopted relative to the improvement of our Colonial Ports".(22)
While the whole issue of harbour facilities was being debated, two black southeasters during 1846 reminded everyone of the vulnerability of shipping in Port Elizabeth's open roadstead. In March a gale forced three ships ashore. Soon the wrecks "laying directly in the way upon the beach between the old jetty and the mouth of Bakens (sic) River", made work at the landing beach difficult and dangerous: "it was only the other day that a boat was dashed to pieces against one of them". As a result Jamison recommended that some regulation be formulated requiring buyers of wrecks to remove them within a specified time. Another painful reminder of the inadequacy of port facilities came in November when the CALIFORNIA's ship's boat was upset while landing on the beach. Although the captain was struck on the back and knocked unconscious, he was fortunately pulled from the water.

There was stunned disbelief in December 1846 when it was made public that the surveyor general had been directed to prepare plans for a breakwater and pier at Mossel Bay. This was seen as the "criminal neglect of the interests of the Second Port of the Colony". The Mossel Bay development resulted in a wry comment from the Herald:

A CONUNDRUM

If the Cape Government passed an Ordinance for the erection of a Breakwater in Mossel Bay, 240 yards long, what is the length of conscience possessed by each member of Council???
5.2 JAMISON SCHEME: 1847

Despite the easterners impression of being left out in the cold, the turning point, as far as government involvement in Port Elizabeth harbour development was concerned, came in early 1847 when Montagu commissioned Jamison to survey Algoa Bay in detail from Cape Recife to the Swartkops River. The survey was to prepare the way for the appointment of a commission of inquiry into "the present state of your Harbour". He also sent Jamison a copy of Lloyd's breakwater plan. (29) Up to then, the only chart of Algoa Bay was one based on Lieutenant Rice's 1797 survey. In July 1843 Sir John Marshall of HMS ISIS took his own readings and found the chart grossly inaccurate. It put off many ship captain's entering Algoa Bay because it showed a curved indentation instead of a bay. At the time Marshall had recommended a rescour of the bay.[30] Montagu suggested that Jamison get Lt Charles Forsyth, stationed at Waterloo Bay, to assist him.[31] Jamison and Forsyth had in fact already undertaken a survey in September 1846 while Forsyth had been passing through on his way to Waterloo Bay. The results, however, had never been reported to the governor because of the more pressing importance of the 7th Frontier War (1846-47). (32)

Shortly afterwards it was announced that a commission had been appointed to report on Algoa Bay's "natural facilities for the construction of a Breakwater or such other improvements as are warrantable and necessary". (33) The commission included: the surveyor general (Lt Col C C Michell), a scientist, (Prof J Adamson) [34] the resident magistrate (Capt W Lloyd), the harbour master (Lt Jamison) and a merchant (W Fleming). Because it was only due to meet in March 1847, there was "no immediate hurry for the survey of Algoa Bay" by Jamison and Forsyth. (35) In any case the meeting was postponed until June because Michell was unable to attend. [36] Meanwhile, Adamson set about gathering what information he could in Cape Town. Most of the evidence he heard was favourable to Algoa Bay's safety, despite the loss of 31 ships totalling 5797 tons worth about £115 940 (excluding cargoes) between 1823 and 1846. [37]
But the whole project lost momentum in May 1847 when it was reported that the British government had not sanctioned the Cape Town breakwater. (38) As a result the Port Elizabeth commission was suspended. (39) The Cape government was no longer interested because the project was unlikely to gain British approval: (40)

In short, the failure of the Table Bay plan is to involve that of Algoa Bay, - Dog and Manger fashion! We CAN'T and you SHAN'T get it.

Meanwhile the colonial secretary was unable to comment on a Port Elizabeth memorial on harbour improvement because he had never received any report from the governor on the matter. As a result it was referred back to Maitland. (41) By June there was a call to resubmit the earlier address to the governor which had gone unheeded. Amongst other things it called for the erection of a jetty, the laying down of moorings, a resurvey of Algoa Bay and pointed out the unprotected nature of the bay in time of war. (42) At the same time William Lloyd raised the question of the government laying down moorings in the roadstead. Without them insurance premiums for ships calling at Algoa Bay were exorbitantly high. He supported his plea by sending a copy of the report he had written after the destruction of the first jetty in 1843. (43)

Accidents continued to occur regularly at the landing beach. "These accidents on our beach are of so frequent occurrence that we should like to see such a fine imposed as might deter parties from incurring in ship's boats so certain danger". (44)

In August 1847 the harbour master, Jamison, submitted a plan to improve harbour facilities at Algoa Bay. (45) Because the detailed survey requested by Montagu had never been undertaken, he based his plan on information gained from the unofficial 1846 survey he had done with Forsyth. He proposed the laying down of moorings at right-angles to the prevailing wind. His estimate for 10 first-class and 11 second-class moorings was £4358 8s 8d. He further suggested the building of a 100 metre pile jetty protected by a transverse
JAMISON'S SCHEME (1847)

Madam'ly & leadoff?
and proceed with Bend Keys.

Low water

Shelter for Boats

Gradual shelving bottom mark

Cape Archives (CO 2840 5/8/1847); Cory Library (Map 53, S/755/1 1)
breakwater at a suitable site. This would "render more certain and secure the...disembarkation of troops, stores, &c., at this very important port of the colony, and facilitate the means of mercantile transport generally". (47)

Good news came in September 1847 when it was announced that a draft ordinance for the improvement of the colony's harbours was being prepared.(48) In October Ordinance Number 21, "for Improving the Ports, Harbours and Roadsteads of this Colony", was passed.(49) It proposed to set up a harbour commission at each port to develop harbour facilities. Each would be:(50)

empowered to raise money on loan on the Security of the Work and under the Guarantee of the Colonial Revenue, and also to receive the proceeds of any lands sold and wharfage dues, until the debt and interest have by these means been refunded.

Jamison was, however, simultaneously transferred to Simon's Town at the end of October, thus removing an active harbour master and the designer of the latest harbour scheme. The move was deeply resented in Port Elizabeth.(51) To add insult to this injury, by December it was reported that the government had voted £12000 under the new harbour legislation to improve the Kowie. In Port Elizabeth it was felt that the legislative council had not fully appreciated the lessons of "Dame Experience". (52) In mid-December there were queries about the board appointed under Ordinance 21:(53)

Under the new Harbor Bill we find...Local Commissions are to be appointed with whom all local improvements are to originate, and if we are mistaken if we have not heard that gentlemen were nominated for this place. Who are the gentlemen, what are their names, and what the cause of their RETIRING disposition?

However, the first "Commissioners for improving the Port and Harbour of Algoa Bay" were only appointed on December 29. They were W Lloyd
(Chairman), T A Bennet (harbour master), W M Harries, W Fleming and E H Salmond. Under the ordinance three of the five members made up a quorum. (54)

Things seemed to be well on their way when Montagu spent the early part of February 1848 gathering information in Port Elizabeth on local issues. He announced that Cape Recife would be the site of a new lighthouse and a bridge would be built across the Sundays River before the end of the year. The information he collected on port facilities, however, was for his own information to assess future plans. (55) In any case, the local harbour commission did not bother to consult with him and as yet had not voiced a collective opinion on the whole issue. (56)

By May 1848 nothing had come of the new harbour dispensation which resulted in increasing complaints about the commissioners: (57)

Thus it will be with our Harbour Commission there will be a great deal of talk! talk! talk!!! and the result may be fudge after all.

A more realistic comment on port facilities was made in a letter to the Herald. The writer pointed out that if the solution was merely the laying of moorings, then there would be no need for commissioners at all. Other favourite projects had been the Manby's apparatus (58) and lifeboat. Both, however, were dismal failures - the lifeboat condemned by the port office and the mortar used only once. It was felt that Montagu would support a jetty scheme only to maintain his popularity as he had done with the Montagu Pass. Thus an immense amount of money would be wasted before the region's real needs were discovered: (59)

Mr. Editor; pray let the harbour alone and the Commissioners also. If they forget their appointment so much the better for the place. Change your subject, cry out for decent roads, that should be the first object - Harbour improvements, (if really necessary) will follow.
250 Tons of goods can be landed easily in one day with the present means, but not so easily forwarded, - the last week not a wagon has left this place with goods through bad roads.

The government had in fact given roads priority over eastern harbour development. Montagu's central road board was already opening the Zuurberg Pass and busy on the Port Elizabeth-Grahamstown road.[60]

5.3 PILKINGTON SCHEME: 1849-51
Despite the complaints about the harbour commission's inactivity, by June 1848 they had completed a report which W M Harries undertook to lay before the legislative council.(61) Towards the end of the year the commissioners were informed that the newly appointed government engineer, Captain George Pilkington, "will at once visit the port and so ascertain what improvements are practical and advisable in the present state of the Province".(62) Local opinion, however, was sceptical because of the failure of the government to live up to its promises on the Cape Recife lighthouse.[63]

Although the government engineer duly arrived early in 1849, he "came in the morning and departed after a few hours stay".(64) But he returned in April and a meeting was convened at which W Lloyd spoke at great length on his own scheme. Pilkington pointed out that he had been appointed independently of the governor by the colonial secretary, Earl Grey. After having spent three months taking stock of the situation, he felt that Lloyd's scheme was impossible because of the expense and delay necessary - it could cost anything up to £250000. Whereas a dock could be built at either end of the town for £50000 while the Swartkops could be opened for £30000. Moorings on the other hand would cost £5000 and a jetty protected by a breakwater £15000.(65)

A local committee was set up consisting of the harbour commissioners plus: W Smith, J Hall, A Jarvis, J H Clark and J Paterson. It made the following recommendations:(66)
1. Immediate government aid was required for permanent moorings which were the port's first necessity.
2. A jetty shielded by a breakwater, as suggested by Pilkington, should be built. It should be maintained by wharfage dues rather than tonnage dues as originally proposed by the harbour commissioners.

"The Chief Engineer pleasingly entertained them [the committee] with assurances so far as he was concerned that something would soon be done". (67) His department's track record and his credibility were, however, soon called into question - especially the ability to open the Swartkops or Baakens: (68)

Captain Pilkington must call down power from the moon before he can open one of these rivers. With the sublunary powers which are here at command the thing is never to be attempted for the colonists having paid once in the case of the Montagu pass for what may be termed an Engineer's EXPERIMENT, are now perfectly satisfied that that experiment should be the last.

In May Pilkington reported to the governor that "Moorings were absolutely necessary for the security of Ships at Anchor and also a Wharf for the safe delivery of Merchandize". (69) He thus submitted a plan for a breakwater and 12 moorings. The estimated cost was £29415. From an official communication to the harbour board "it was further intimated that with regard to the Moorings and Jetty-with-shield, as little delay as possible will be allowed. Capt. Pilkington...is determined that the whole shall be prepared to be laid before the first meeting of the Council, and the decision of that body guided by the urgent recommendations of the Chief Engineer". (70)

"Praeconia" of the Herald remarked that, although he differed with Pilkington on the possibility of opening local rivers, he was glad to see that the chief engineer was a man of action - something uncommon in Cape government departments. (71)
By September 1850 local businessmen were alarmed at the prominence the governor had given Kowie harbour development over any other public works. At the same time it was felt that steam communication with Britain would do more for the colony than breakwaters in Table or Algoa bays. By November this had become a reality when the General Screw Steam Shipping Company's £3000 tender for the Cape mail contract was accepted. Their first mail ship, the Bosphorus, reached Cape Town on January 20, 1851, after 40 days at sea.

Meanwhile, at Port Elizabeth a new scheme was proposed whereby the Baakens was to be opened to receive surfboats. Although no details were made available, it received a favourable report from W Lloyd and was sent to the government for consideration. It was felt the project was feasible because it would be similar to Port Natal, only on a smaller scale. But, as in the past, there was no response.

The only attempted improvement to port facilities was the privately sponsored Algoa Bay Mooring and Watering Company which was formed in 1850. For a while the provision of water seemed likely to become the first permanent facility at Port Elizabeth. "Jetties, mooring company, projected breakwaters have been, but now are not". The new venture, however, also ran into trouble and soon ceased operating.

In November 1851 Pilkington tried to relaunch his breakwater scheme. Unfortunately it came at the wrong time and his plan was condemned all round. Some criticised its practicability while most felt the matter should rest until representative government was obtained. At about the same time there was a move by some to have E H Salmond made Montagu's adviser on local harbour improvement to express local feeling on the issue. But the attempt was felt to be invalid without the customary public meeting to endorse his claim to such a post.

There was also strong reaction to a legislative council scheme to impose a wharfage tax at Port Elizabeth to finance the construction of a jetty. The whole need for a jetty was questioned.
A tax is much easier put on than got rid of... When landing cannot be done on the beach, a boat will not be able to lay alongside of a jetty... We have had the opinion of a few amateur engineers... but the Colony cannot afford it... therefore a matter of this kind ought to be well considered before it is undertaken. We have already had experience in jetty building, and after all it was found of no use.

The writer went on to point out that all that was really necessary were moorings and a harbour light. The public were warned against burdening themselves with a debt they could never hope to pay. The whole issue should be "safely left till we get Resident Government: in fact, if persisted in at the present time, the people ought to petition against it."(82)

The importance of moorings to the safety of Algoa Bay shipping was raised again in December 1851 with the wreck of the WEST INDIAN.(83) The local community was reminded that in the end the consumer paid for the losses which in this case involved a cargo worth £20000.(84)

There was strong local reaction to William Cock's success in getting a bill passed to raise a loan to open the Kowie as the only means of saving Grahamstown "from speedily sinking into obscurity and decay".(85) It was pointed out that Grahamstown's problem was not Port Elizabeth's prosperity. Instead it was the removal of the military headquarters to King William's Town. Thus the money to be spent on the Kowie would be better spent on improving the Port Elizabeth-Grahamstown road because "£50,000 voted to the Central Road Board, would have been forming fresh arteries".(86)
5.4 SALMOND SCHEME: 1852

Meanwhile, a committee had been appointed by the legislative council to investigate Port Elizabeth and Kowie harbour improvements. (87) The issue was complicated by the fact that it had been reported that some of the harbour commissioners had resigned at the height of the anti-convict campaign. But this was later shown to be untrue. (88) Although the evidence gathered by the committee conflicted "in almost every point involved", most of the people examined during early 1852 agreed that moorings should be laid in Algoa Bay. (89) Jamison's 1847 scheme was looked at again and Pilkington submitted a revised plan. The latter was called into question by the local harbour board as they felt that the expense involved was beyond the colony's resources. Instead they supported a plan by one of their own members, Captain E H Salmond. This was a £7094 10s scheme which included a pile breakwater and a 120-metre jetty. (90)

Some observers, however, felt that the whole investigation was a farce. To demonstrate this, the Eastern Province News published the following questions put by the Eastern Province members of the committee: (91)

Godlonton: would a jetty improve the morality of Port Elizabeth?
Christian: what is the mortality of Fingoes on the beach?
Reply: the Fingoes in this Colony as of the Gaugers [92] and Donkeys in the mother country, no one ever heard anything of their deaths or burials.

In May 1852 it was pointed out, in reply to complaints in Cape Town and Grahamstown about delays in landing goods at Port Elizabeth, that the delays were in fact on the Grahamstown road, mainly at Howison's Poort. In any event nothing had been done to improve port facilities. (93) Despite the committee, the only tangible development in 1852 was the introduction of General Screw Steam Company coasting steamers. Their sailing times were synchronised to the steamers plying between England and the East. [94]
CHART ILLUSTRATING CAPTAIN SALMOND'S
PROPOSED BREAKWATER AND JETTY

A. High water mark - spring tides
B. Low do. do.
C. Proposed breakwater 700 ft
   from low water mark
D. Proposed dwarf jetty 400 ft
   on an inclined plane
E. Dotted line showing area
   protected by breakwater in
   worst weather
F. Direction of worst prevailing
   wind - E.S.E.S.E.
G. Direction of current
H. Baakens River
I. Unalienated Ground at present
   occupied by Stores &c on
   sufferance
J. Boating company's Buoys
K. Proposed situation of moorings
   1400 yards from
   the beach in 5 1/2 fathoms
   water

Diagram of portion of breakwater
   to a larger scale dotted lines
   represent stringers & braces

March 1852
The long period of theorising about harbour improvements eventually came to an end in mid-1853. Once again it was private enterprise that took the lead. A local businessman, Joseph Graham, had thought that a jetty similar to the one at Cape Town would be suitable for Port Elizabeth. He got the local surveyor, Robert Pinchun, to survey the Baakens mouth and then approached the Cape Town engineers, Penketh and Calvert, to do a feasibility study. (95) Their plans for a £20000 causeway running out on the south side of the Baakens arrived in Port Elizabeth in November. But Graham was nervous about financing such an expensive experiment. He felt harbour improvement could best be met by a public company. A meeting was held on November 14 and a provisional committee was appointed to prepare a document on the subject. [96]

Personal interests and the prospect of representative government, however, saw no-one prepared to establish the proposed wharf company. (97) By mid-1854 differences had been settled and the Port Elizabeth Wharf Company committee appointed the engineer Scott Tucker to draw up plans. He proposed a £9000-14000 breakwater which would protect shipping as well as landing. (98) The company's shareholders met on August 3 to discuss Tucker's plan. (99) Ultimately the plan was abandoned because its size went beyond the means of public, let alone private, enterprise. (100)

Meanwhile the harbour board had decided to take no further steps until it was given title to the beach to enable it to finance improvements. (101) Nature then lent a hand to speed up the process. The landing beach had become so scoured by early 1855 that:

5.5 PORT ELIZABETH WHARF COMPANY: 1853-55

those public improvements which were once regarded as merely desirable and expedient here, have now in the language of the address of the Wharf Company to his Excellency the Governor, become absolutely necessary. The entire sand is washed away and nothing but jagged rocks exposed over which the surfboats have to be dragged and broken...surely the time has now come when
1855 PLANS Page 150

some better means of landing may be contrived than that by means of Fingoe Labor.

5.6 HARBOUR BOARD INQUIRY: 1855

Coincidental to these developments, the governor had approved two new members to the Port Elizabeth harbour board to aid it in preparing documents required for a new bill on harbour improvements to be presented at the next parliamentary session.[103]

In addition, the governor, Sir George Grey (1854-61), arrived in Port Elizabeth on January 19, 1855, and received local deputations. The harbour board submitted an address on local improvements. In response the governor mentioned the proposed bill:[104]

the principle of which...should be that these improvements were undertaken and executed by a corporate body vested with the trust of the harbour - which body would be amenable to Government and the public far more than any private Company.

He went on to point out that the corporate body would be vested with the rights to enough beach to raise sufficient revenue to dispense with wharfage dues as it was important to make Algoa Bay a free port.

The provisional committee of the wharf company then laid their plans before the governor and asked for a grant of beach at the intended site. Grey informed them of the proposed corporate body. He saw difficulties in conceding extensive privileges to a private harbour improvement company. Graham replied that they felt that the scheme should be a public work but felt the company had accomplished its object if harbour improvements were expediated by its actions.(105) Later the governor inspected the landing beach and proposed sites of the Victoria Quay [106] and wharf company scheme. He said he would get an engineer to study the wharf plans and if the harbour trust corporation did not materialise then the municipality might lay claim to beach revenue.
It was generally felt that Grey's visit had concentrated attention on the problem of harbour improvements: "Not merely is the Harbour Board awakened to its duty, but the entire community as well. Dull perception has been made keen by the present difficulties of landing."(107) The Herald went on to warn that there was the need for facilities that could be enlarged at a future date. Although the sum of £9000 had been mentioned for a wharf, the scheme under consideration went little beyond the bare necessities. Up to now the only scheme "consisted of a wooden imitation jetty, some paltry erection which school-boys would conceive, and sketch at a moment in their idleness on a slate".(108) Something on a bigger scale was required because improvements would benefit the whole province and not just Port Elizabeth.

Reassured by the governor's promises, the harbour board immediately instructed Pinchun to survey the landing beach.(109) But much to everyone's consternation, the government secretary informed the harbour board that the government would not grant it any land. The matter was only cleared up by Grey on his return to Port Elizabeth from the frontier on March 3. The secretary had simply misunderstood his instructions. In fact the governor was so anxious to get things started that:(110)

he proposed at once to vest in the existing Harbour Board the beach lands first on the trust that they may be held for the improvement of the port; and secondly, on the further trust that when a permanent Board is constituted as by provisions to be contained in an act of the Legislature on the subject, then that the existing Board reconvey its trust of the beach lands to the permanent Board so appointed.

At this stage the harbour board had no powers and not even the means to hire a secretary. Faithful to his word, Grey got parliament to grant the harbour board £3000 to cover immediate expenses. The right to the beach between the Fishery and the Swartkops river was vested in the board until an act of incorporation was passed.(111)
Meanwhile several plans were submitted to the harbour board. In addition various local men were invited to give their opinions on harbour improvements.\footnote{112} The board took evidence from nine individuals between May and July 1855.\footnote{113} H W Piers of the ordnance department submitted his plan in writing.\footnote{114} Only J O Smith declined to appear before the board.\footnote{115} Although all 10 proposals differed in detail, the broad issue revolved around two key matters:

1. Where to place a breakwater if one was built.
2. Whether to open the Baakens as a boat harbour or not.

The majority were against opening the Baakens.\footnote{116} They supported the idea of building a breakwater on the reef of rocks near the watering company tank, south of the Baakens. There were, however, two options: either to build a massive breakwater about 1200 metres long to accommodate ships, or, a 400-metre one for boats. Both would protect the landing beach where jetties could be built.

While George Uppleby agreed on the site for a breakwater, he wanted it and an angled wharf from the opposite side to protect a boat harbour in the Baakens. The local government engineer, H F White, on the other hand, proposed a protective breakwater at Fishery point to protect a scheme similar to the Kowie one at the mouth of the Baakens.

E H Salmond felt the breakwater scheme was too extravagant. He suggested a total break away from the traditional landing area. His scheme entailed a 230-metre small boat breakwater at Rocky point, between Shark River and Fishery point. A 90-metre inclined jetty would allow boats to discharge at all tides. He estimated the cost to be £25000.

None of the promoters were particularly worried about potential silting. Alfred Jarvis believed that the effect of the breakwater on sand deposits would depend on its length. If it was too short, sand would be deposited in front of it, which was immaterial as silting was in fact caused by the prevailing winds. The southeast gales
stirred up the sand and the undertow carried it out to form a bar outside the breakers. In turn the westerlies gradually washed it back in - "thus the sand may be said to ebb and flow". Piers felt that the beach north of the Fishery was supplied with sand by the sea and the nearby sand downs in westerlies. The southeaster broke up the sand and the undertow deposited it in a bank parallel to the beach. As the bay's inner current started at Fishery point it was unaffected by the sand from the downs. White reckoned that sand was moved by roller action in Algoa Bay and not by currents as was the case in Table Bay.

The need to break the power of the Mfengu beach labourers was the primary motivation behind some of the schemes. Joseph Graham felt that shipping delays were as a result of being dependent on Mfengu labour. The problem was that nobody else was prepared to work in the water. A wharf would dispense with this problem. White blatantly stated: "The great object of the works I propose in the Baaken's River, would be to dispense with the Fingoe labor".(118) Uppleby considered the method of handling goods "a most barbarous and inefficient one; which must speedily have an end, in consequence of the continually increasing demands of the Fingoes".(119)

J H Clarke believed that the only ultimate solution was the formation of a landing and shipping corporation on the lines of those at Liverpool, Hull, Glasgow and Southampton. It would solve the problem of clashing interests between the various boating companies. He proposed that the harbour board be converted into a harbour corporation with exclusive landing and shipping rights.

In September 1855 the harbour board submitted the evidence it had taken to the governor.(120) Although they had included Scott Tucker's wharf company plan, they were:(121)

unanimously of opinion, that a boat harbor would meet the exigencies of the port - the Commissioners have therefore discarded the larger work - a ship breakwater, and confined their attention to a boat harbor.
The only problem that remained was where to site it. The harbour board preferred Salmond's 1852 scheme but took into account that the bulk of the evidence pointed to the best site being the one to the south of the Baakens. Thus by incorporating both, they proposed:

That the site of the breakwater be the northern side of the reef which runs out on the South side of the river...

That the boat breakwater shall be constructed of pile-work, braced and filled up with stones according to that part of the plan submitted by Captain Salmond and that stones be thrown in loose on the weather side as a further protection. The breadth of the boat breakwater to be not less than twenty (20) feet, and the height not less than five (5) feet above high-water mark, and to be carried out not less than a distance of six hundred (600) feet in a direct line from high water mark...(and) tend to the E.N.E. according to the plan of Captain Salmond...

It was estimated the new hybrid scheme would cost a moderate £20000. As parliament had already granted £3000, the secretary to government felt that there should be no obstacle to an immediate start being made.(124) In November the governor announced he was prepared to approve the plan and place the £3000 at their disposal. But he doubted whether government could afford to provide any further finance. In addition he could not help the harbour board with their labour problem. He warned that a labourer would "scarcely continue to work for a Shilling a day when he is surrounded by large numbers of Fingoes earning double or even fourfold that amount". [125] Despite these drawbacks, the board decided to proceed with the undertaking.(126)
FOOTNOTES:

1. CO 4384 No 49 29/1/1845
2. EPH 31/12/1845 p 2
3. Later it was revealed the governor was waiting for the British government's decision on the Table Bay harbour scheme - CO 4384 No 49 23/9/1846 - govt sec to Lloyd.
4. EPH 17/12/1845 p 2, CO 4389 No 58 2/6/1847 enclosure - Lloyd to lt gov. There is no record of the actual plan itself.
5. EPH 17/12/1845 p 2
6. EPH 24/12/1845 p 2 - letter from Parkin
7. EPH 31/12/1845 p 2 - letter from Lloyd
8. EPH 17/1/1846 p 2 - letter from Parkin. Ultimately, the plan was rejected in 1849 by the Cape's chief engineer, George Pilkington, because he calculated it would actually cost four times the initial estimated cost which J C chase gave as £50000 in January 1846 - EPH 10/1/1846 p 3.
9. The name is sometimes spelt Jamieson but he signed his name "Jamison" - M164 19/11/1845 - PEHM to lt gov sec (and following letters).
10. As early as September 1845, the lieutenant governor informed Montagu that Gubb was to be appointed harbour master - CO 2479 26/9/1845 - actg lt gov sec to govt sec. Gubb and others officially applied for the post early in October - CO 2479 2/10/1845 - lt gov to govt sec (PESC recommended E H Salmond), 3/10/1845 - Bisset to govt sec, 8/10/1845 - Gubb to govt sec, 16/10/1845 - lt gov to govt sec (returned Bisset and Sterley applications), CO 2825 24/10/1847 - Jamison to govt sec.
11. EPH 29/10/1847 p 3 - letter from "Expositor"
12. M164 19/11/1845 - PEHM to lt gov sec, CO 2825 21/11/1845 - PEHM to govt sec
13. Breitenbach (1958) cites Jamison's appointment as one of the first examples of Montagu's new policy of qualifications outweighing connections for civil service posts - p 187.
15. EPH 29/8/1846 p 3 - letter from "XYZ"
16. EPH 8/8/1846 p 2
17. EPH 29/8/1846 p 4
18. ibid - legislative council report
19. EPH 5/9/1846 p 3 - letter from "XYZ". See also editorial comment p 2 and letter from "Mercator" - EPH 12/9/1846 p 2.
20. EPH 19/9/1846 p 3, CO 4028 No 148 - PE memorial to governor (useful Chase statistics 1821-45), CO 2480 E19 12/9/1846 - PE inhabitants to govt sec, CO 2832 29/9/1846 - Lloyd to govt sec
21. EPH 19/9/1846 p 3
22. CO 5308 28/9/1846 pp 315-16 - govt sec to Joseph Smith, EPH 3/10/1846 p 2
23. M164 27/3/1846 - PEHM to actg lt gov sec
24. CO 2832 10/11/1846 - PEHM to govt sec, M164 10/11/1846 - PEHM to govt sec
25. "An Ordinance for the removal of wrecks" was soon promulgated but ironically when the wreck of HMS THUNDERBOLT was put up for sale in April 1847, Jamison "could find no bidder owing to the new Ordinance regarding breaking up wrecks in a certain time" - M164 5/1/1847, 30/4/1847 - PEHM to govt sec.
26. EPH 21/11/1846 p 2
27. EPH 26/12/1846 p 2 - letter from "Leopold". Michell had surveyed Mossel bay in 1835 in anticipation of being called upon to plan a harbour. He thus used this survey when he prepared his 1846 plan - LCA 23 No 15 16/9/1846 - surveyor general to govt sec.
28. EPH 25/9/1847 p 2
29. CO 4928 14/1/1847 pp 44-46 - govt sec to PEHM
30. GJ 12/9/1844 p 3 - letter from "Newport" who was present when the readings were taken. EPH 19/2/1848 p 3 - reprint of Marshall's Nautical Magazine article.
31. CO 4928 14/1/1847 pp 44-46 - govt sec to Jamison. Forsyth had 12 years experience on board HMS BEAGLE surveying the coasts of Australia and South America – CO 556 24/1/1846 (presumably incorrectly dated and should read 1847) - Forsyth to govt sec.
32. CO 2840 5/8/1847 - Jamison to govt sec
33. EPH 16/1/1847 p 2, 6/2/1847 p 2, CO 4928 26/1/1847 p 96 - govt sec to Jamison, CO 5308 26/1/1847 p 421 govt sec to Fleming, M164 2/2/1847 PEHM to govt sec
34. Adamson was a Presbyterian minister who was a professor at the South African College from 1829-50, lecturing in mathematics, physics, classics and English - DSAB vol I pp 5-6.
35. CO 5114 2/2/1847 - govt sec to Forsyth
36. As late as July Forsyth still had not been to Port Elizabeth and presumably never did - CO 556 21/7/1847 - Forsyth to govt sec.
37. LCA 23 No 16 14/11/1848 - Adamson to govt sec, enclosures: evidence - 20/2/1847 W A Train, 27/2/1847 Capt Long, 13/3/1847 Capt Findlay, letters - 27/10/1846 Lloyd to govt sec, 14/1/1847 govt sec to PEHM, 5/12/1846 Lloyd to govt sec (list of wrecks at Port Elizabeth).
38. EPH 1/5/1847 p 2
39. LCA 23 No 16 14/11/1848 - Adamson to govt sec
40. EPH 1/5/1847 p 2 - letter from "Cosmopolite" of Port Elizabeth
41. CO 5308 13/3/1847 pp 461-62 - govt sec to W Smith
42. EPH 5/6/1847 p 2 - letter from "One of the Subscribers"
43. CO 4399 No 58 2/6/1847 - Lloyd to gov
44. EPH 26/6/1847 p 2 - editorial comment. Also EPH 3/7/1847 p 1.
45. CO 2840 5/8/1847 - Jamison to govt sec, PEHB-govt correspondence (1854) pp 8-10
46. The eventual site chosen by Jamison was "beyond the Baken's" (sic) - EPH 23/10/1847 p 2.
47. PEHB-govt correspondence (1854) p 9
48. EPH 11/9/1847 p 2
49. Ordinance No 21, 20/10/1847
50. GH 23/17 No 144 29/11/1847 - govt to colonial secretary
51. EPH 23/10/1847 p 2, 6/11/1847 pp 2-3
52. EPH 18/12/1847 p 2
53. EPH 25/12/1847 p 2
54. CO 5837 29/12/1847 - proclamation
55. Montagu had been highly unpopular in 1844 when he had shown more interest in J O Smith's dwarf jetty and railway than in Port Elizabeth's needs in general. See section on J O Smith's dwarf jetty in Early Harbour Development.
56. EPH 12/2/1848 p 2 - editorial
57. EPH 10/6/1848 p 3 - letter from "Uncle Sam". Another example is a letter from "Bartholomew Diaz" - EPH 27/5/1848 p 3.
58. See appendix on Manby's apparatus.
59. EPH 19/2/1848 p 3 - letter from "A Subscriber"  
60. See section on Roads in Trade for road development at a time the government was supposedly doing nothing for the eastern Cape.
61. EPH 1/7/1848 p 3
62. EPH 30/12/1848 p 2, CO 4934 21/12/1848 pp 179-82 - govt sec to Pilkington, CO 5310 21/12/1848 pp 108-9 - govt sec to PEHB chairman
63. See appendix on Lighthouses.
64. EPH 31/3/1849 p 3
65. EPH 14/4/1849 p 2
66. ibid
67. EPH 21/4/1849 p 4
68. EPH 28/4/1849 p 2
69. LCA 23 No 14 28/5/1849 - civil engineer to govt sec
70. EPH 9/6/1849 p 2
71. EPH 14/7/1849 p 4
72. EPN 21/9/1850 p 4
73. EPN 23/11/1850 p 2
74. EPN 8/2/1851 p 3
75. EPN 30/11/1850 p 2
76. EPN 7/12/1850 p 2
77. EPN 5/10/1851 p 4
78. The Algoa Bay Mooring and Watering Company was only officially wound up in 1857. See section on Boating companies in Landing & Shipping for details.
79. EPN 15/11/1851 p 2
80. PET 6/11/1851 p 4
81. EPN 15/11/1851 p 4
82. ibid
83. EPN 13/12/1851 p 4
84. EPN 6/12/1851 p 4
85. PET 15/1/1852 p 2
86. ibid - letter from "A.Z."
87. PEHB-govt correspondence (1854) p 1
88. ibid pp 1-2 & 12
89. ibid p 2
90. ibid pp 11-13
91. EPN 6/3/1852 p 2
92. Guagers were Excisemen.
93. EPN 15/5/1852 p 2
94. EPN 10/4/1852 p 2. The first General Screw Steam Company coaster to call at Algoa Bay was the SIR ROBERT PEEL on August 8, soon followed by the FETTERCAIRN - EPN 10/8/1852 p 3.
95. EPN 26/7/1853 pp 2-3, 6/9/1853 p 3
97. EPH 16/5/1854 p 3
98. EPH 19/7/1854 p 2
99. EPH 1/8/1854 p 3
100. CO 665 No 150 14/9/1855 - PEHB sec to govt sec
101. EPH 26/6/1854 p 3
102. EPH 23/1/1855 p 2
103. EPH 23/1/1855 p 2 - both the new PEHB members were municipal commissioners - F D Deare and J Paterson. They replaced W Lloyd, who had died, and the dismissed harbour master, T A Bennet - EPH 6/2/1855 p 2.

104. EPH 23/1/1855 p 2

105. ibid

106. See appendix on Victoria Quay.

107. EPH 30/1/1855 p 2

108. ibid

109. EPH 6/2/1855 p 2

110. EPH 6/3/1855 p 2

111. EPH 22/5/1855 p 3

112. ibid

113. The evidence to the PEHB by the various individuals was reported fully in the press:
   T W Gubb and A Jarvis - EPH 29/5/1855 p 3
   J Graham and J H Clarke - EPH 5/6/1855 p 3
   H F White - EPH 12/6/1855 p 4
   E H Salmond and G Uppleby - EPH 19/6/1855 p 3
   G Wilson - EPH 3/7/1855 p 3
   E Wheatland - EPH 10/7/1855 p 3


116. The majority were: Gubb, Jarvis, Piers, Wilson, Wheatland, Clarke and Graham.

117. See section on Mfengu & beach labour in Landing & Shipping.

118. EPH 12/6/1855 p 4

119. EPH 19/6/1855 p 3

120. CO 5316 No 812 20/9/1855 govt sec to PEHB sec

121. CO 664 No 150 14/9/1855 - PEHB sec to govt sec

122. CO 664 No 150: enclosure 3/8/1855 - PEHB resolution

123. The breakwater was to be 6,1m wide, 1,5m high and 183m long.

124. CO 664 No 150: enclosure 19/9/1855 - "Mem. for H.E." from govt sec, CO 5316 No 1016 25/10/1855 - govt sec to PEHB chairman

125. CO 5317 No 1104 20/11/1855 - govt sec to PEHB sec. See section on Mfengu & beach labour in Landing & Shipping for more detail on labour problems.

126. EPH 6/11/1855 p 2
6. CONSTRUCTION
6. CONSTRUCTION: 1855-67

6.1 BUILDING THE BREAKWATER: 1855-62

Towards the end of 1855 the turning point in Port Elizabeth harbour development was reached. After almost a decade of futile planning, the harbour board set about the actual construction of a scheme. A new era in government participation was heralded by the November announcement that the harbour board was to be advised by an assistant government engineer who was to be permanently stationed at Port Elizabeth. The engineer, W M Woodifield, was "directed to render his professional assistance to the Harbour Comrs" as soon as he had completed a survey of Meiring's Poort.(1) In the meantime the board was requested to report on how they intended to use the £3000 parliament had voted to it for initial expenses.(2)

With the added assurance that Woodifield would be available to advise them from time to time, the harbour board set about the preparatory work. Suitable workshops were built, a quarry opened to the south of the Baakens and a tramway laid to convey the stone to the proposed site.(3) Meanwhile, Algoa Bay was surveyed for the admiralty by Lt Joseph Dayman. Although he sent a copy of the soundings he made to the harbour board, his chart was "on too small a scale to be of service on any inquiry on the subject of building a boat jetty".(4)

When the harbour board made its annual report at the end of January 1856, they expected the preliminary work to be completed within a month by which time Woodifield would have finished his work at Meiring's Poort.(5) The board, however, wanted the governor to "define more particularly" Woodifield's position with respect to the breakwater scheme as they wished to "avoid the expense of any additional professional aid".(6) They were relieved to learn that he had been "instructed to afford you every assistance in his power, not only in the capacity of a consulting Engineer, but in conducting the work which the Board of Commissioners have decided upon".(7) By early March it was reported that the harbour works "now begin to make a little appearance".(8) This was seen as a commendable effort. In nine months, evidence had been taken, digested and government permission
obtained. Tenders were called for the supply of 500 kilogram stone blocks and the building of a new port office and surf boat.[9] Woodifield recommended that the board build the new port office on the site of the old boat house because the beach at the site they had chosen was obstructed by rocks which would make the launching of the port- and life-boats impossible.(10)

Tramway controversy:
Meanwhile a controversy erupted over the trucks that had been supplied by the government engineer's office for the tramway. The harbour board complained at the end of April that they were "perfectly useless" because they were made for a 1,83 metre gauge. They cited Woodifield as their authority for such an opinion. Pilkington immediately demanded an explanation from Woodifield;(11)

I cannot see that a 6 feet gauge is "perfectly useless" for a tramway which was not previously laid: it was in your power to make the guage to suit the Trucks, and, in courtesy to the Head of your department as well as in duty to the service, you should either have done so, or immediately to have given me your reasons for an opposite course.

Woodifield replied that the term "perfectly useless" must be attributed to the harbour board secretary, Thomas Wormald, as he had only reported on the rails and not the trucks. But in it he had "made Especial mention of a 4'8½" Guage [12] because in the first place, we had at the time of application a line of single way with raised siding laid down and in working order from the Quarry to the tip End and secondly we were provided with trucks pitched to a 4'8½" Guage."(13)

In his reply Pilkington pointed out that Woodifield had not originally supplied the reason behind his request for the smaller gauge. Under the impression that nothing had been laid, he had sent the wagons with rails that could be laid to suit them. "I accept your kind assurance that you intended nothing uncourteous to the Head of your Department".(14)
Woodifield-Warren clash:
Meanwhile Woodifield had clashed with the harbour board's resident engineer, A G Warren. [15] In June Woodifield wrote to the board: [16]

In consequence of some remarks dropped from Mr. Warren the clerk of the works yesterday respecting the relative positions which he and I hold with regard of the Harbour Board I deem it expedient in future to prevent any misunderstanding on the subject to bring the matter at once to the notice of the Board... (who) granted me the services of Mr. Warren with whom I have had every reason to be perfectly satisfied.

It would however appear that Mr. Warren is under the impression that he is only answerable to the Board and not to me for the due execution of his duty, and it is for the purpose of determining this point that I now trouble the Board with this communication.

The harbour board informed Woodifield that, while the works were under his general supervision as a consulting engineer, Warren was directly under their control. If there were any alterations that did not deviate from the board's plan, he could tell Warren "but not the subordinates employed under him". They also reserved the right to instruct Warren without consulting him. He was free to advise them if he felt any of their actions were wrong. [17]

Harries proposal:
In August W M Harries entered a "protest against what I consider to be an erroneous and unnecessary expenditure in carrying on the present wooden stage over the stone work as well as against the costly and wasteful system by which the stone is conveyed to the hands of the masons." He further went on to propose a moveable stage for when pile-driving commenced. [18] Woodifield was asked to investigate the complaint. He felt that there was no other way to move five ton rocks down a 45° incline. Harries's proposal to lay the tramway directly on the completed stone work would result in the risk of damage to it and no work being done during rough weather. The
W M HARRIES SKETCH OF PROPOSED INCLINED PLANE (1856)

Cape Archives (PWD 1/784 9/8/1856)
advantages of the present tram system would become apparent as work proceeded. The wooden stage was necessarily high because of the relative heights of the quarry and the high water mark. Once the breakwater was completed it could be removed "and fitted as a landing jetty at very little expense".\(^{(19)}\)

Work progresses:
Soon moves were made to acquire piles. The governor gave "the necessary authority for cutting, free of charge for licence, as much yellow wood in the Tzitzikamma Forest as the Commissioners may require". But the board was warned that yellow wood was unsuitable for marine use. "White Els", however, "has stood the test of time in a remarkable way on the shore of the...\,(George) Division".\(^{(20)}\)

Ultimately it was decided to use sneezewood piles but as these were in short supply, iron wood had to be used.\(^{(21)}\)

The harbour board soon discovered that their quarry could not supply large enough rock so they were forced to tender out. Fortunately they managed to get a good supply at a reasonable rate.\(^{(22)}\) The THEMIS was also purchased, at Woodfield's recommendation, with the intention of sinking it to form part of the breakwater. But the idea was eventually scrapped because some board members objected.\(^{(23)}\)

The board had another clash with the civil engineer's office. This time it was over the appointment of a works foreman. They had approached Woodifield in November, who had passed on the request to Cape Town.\(^{(24)}\) Pilkington had then gone ahead and appointed C E Tarbut without referring his recommendation back to the board for a decision.\(^{(25)}\) As a result the board decided to override Pilkington and appointed John McDougal instead. When Tarbutt arrived in Port Elizabeth to take up his appointment, he found himself without a job.\(^{(26)}\)
Despite the problems, the board believed progress during 1856 was very satisfactory. About 85 metres or one third of the breakwater's proposed length had been completed. (27) The harbour board also began to make enquiries about jetty construction. Experience in Mossel Bay had shown that a tubular jetty would offer less resistance to Algoa Bay's heavy rolling seas. (28)

Woodifield discouraged the board from using their proposed method for pile driving because many "difficulties forecast themselves". He made several suggestions but would report more fully after he had consulted with his head of department in Cape Town. (29) Shortly afterwards he offered an alternative, cheaper breakwater plan. The advantage of his pile-only scheme, apart from cost, was that it could be used while still under construction. If it failed, the present scheme could be continued unhindered, by filling-in the piles with stone as originally planned. (30) But the board saw "no sufficient reason why it should desist from the plan maturely considered and agreed upon, founded on the evidence taken on the subject, and approved by His Excellency the Governor." (31) Despite another plea from Woodifield pointing out the advantages of his scheme, it was not considered by the board. (32)

Work on the breakwater was held up by a shortage of piles. By July very little had been done on the jetty work. But the solid masonry land end had been completed. It was 100 metres long and 12 wide. (33) The harbour board set about rectifying the shortage of piles. It chartered the AMIGOS and MARIE SARAH to fetch piles from Plettenberg Bay, Knysna and Jeffreys Bay. (34) Work only recommenced in early 1858 when the AMIGOS arrived with over 600 piles on board. (35)

Meanwhile in October 1857 Woodifield conferred with the harbour master about a light for the port office. As he was about to go to England, he offered to look for a suitable one there. (36) Tragedy also struck during October. A stevedore, "Long" John Helmore, was killed by a flying rock while Warren was blasting rock on the beach near the EP Boating Company's store. Helmore was about 100 metres away, near the new PE Boating Company's works. (37)
By early 1858 there was a shortage of artisans and an application was made to the emigration board to recruit 43 men in England. [38] Meanwhile the problem was partially overcome by recruiting in Cape Town. [39]

By August 1858 Woodifield's replacement in Port Elizabeth, J A Rogers, was able to report that about 70 piles had been driven during the previous month, making the total 96. But he expected work to speed up as a third pile engine had been put into operation. Unfortunately, heavy rolling surf was delaying progress. [40] By October the outer row of piles extended 57 metres from the stonework. A considerable part would soon be ready for waling pieces and braces. Work, however, had been temporarily held up when the men operating the pile drivers struck. "Others were however speedily procured in their places and no disturbance has since arisen." [41] Up to 35 men were employed on the breakwater.

The works soon became a popular public attraction. Youngsters climbed the scaffolding and rode the trucks after hours. Thus the board had to warn people not to abuse the privilege of being allowed on to the breakwater. Matters were brought to a head when vandals attempted to topple the pile driving machinery into the sea. A £20 reward was offered to convict the culprits and the works were put out of bounds after hours. [42] In time the public again began using the works for recreational purposes. Eventually a ban was placed on children "in the habit of Fishing from off the unfinished portion of the Breakwater." [43]

When Woodifield returned from his trip to England towards the end of 1858, he observed with satisfaction that the breakwater was being constructed as he had advocated in 1857. But he noted that, while most of the piles were iron wood, some were yellow wood. Despite the fact that several of these were expensively protected by scupper nails, he warned the board that yellow wood was unsuitable for marine work and should not be used in future. More ominously he drew "the board's attention to the present state of the Beach and the results which will probably attend the promulgation of the Jetty." [44] Thus
the problem of silting, even before the L-shape had been started or
the piles filled-in with stone, had already reared its head. It
ultimately rendered the entire project useless. Woodifield knew that
the strong southeasterly shore current would deposit sand on the
beach to the south of any projection and scour it away some distance
to the north of it. The problem was to keep the area to its immediate
north clear of sand. Otherwise, "the Jetty as a breakwater would be
useless". In addition Woodifield reported that a "shifting Bar
appears at the end of the pile Work of the breakwater. I have not
however had sufficient opportunities as yet, of arriving at the
reason for its formation and disappearance."(45)

At the same time the decision was taken to build a smaller breakwater
at right angles to the main pile work which by now extended 91 metres
from the masonry. It was designed for landing passengers. The water
depth there was 4.6 metres at spring tide.(46) But the plan was
pruned down to a "protected step-ladder" instead.(47) Within three
weeks the piles had been driven and a start was made on the planking.
The ladder was soon completed and operational by mid-February. Its
use was free despite a rumour of 3s a boat being charged. It was,
however, only to be a temporary measure. Meanwhile, work on the main
breakwater had slowed down because hard ground had been reached. By
now the wooden portion extended 112 metres into the sea on 509 piles.
The whole structure with stonework was 213 metres long.(48)

In May 1859 the Port Elizabeth municipal commissioners impressed upon
the governor the need to get suitably qualified engineers to inspect
the harbour works. They therefore asked "that Mr. Andrews, the
Engineer for the Breakwater at Table Bay, and Mr. E Smith, agent to
the contractor for that work, may be requested to visit Port
Elizabeth, before they return to England".(49) But the governor had
no control over Smith who was, anyway, leaving "by the mail packet of
this month".(50) When Andrews was approached, he felt "he could not
give a proper opinion of works so important as those at Algoa Bay
without a personal survey of from two to three months". Apart from
that he still had to survey Table Bay before he left on the next mail
steamer. But if he returned and could be spared from Table Bay, the
governor would arrange for him to go to Port Elizabeth. (51)

By October 1859 a second set of landing stairs had been constructed. They were 61 metres further out than the first. At the current extremity of the breakwater, they were for "shipmasters who might want to land in their own boats". (52a) Both sets were "much frequented" and "His Excellency the Lieutenant-Governor, lady, and suite embarked from the breakwater... on their way to Cape Town." (52b)

Tenders were called for two vessels to fetch piles from Plettenberg Bay and Knysna. (53) By the end of the year the breakwater extended 154 metres from the stone pier on 822 piles. Despite this progress, work was again held up by a shortage of ironwood piles "occasioned by the extreme apathy displayed by the wood-cutters and others concerned, both at the Knysna and Plettenberg's Bay." As a result work had been suspended for 10 weeks when the works engineer, Warren, made his annual report in January 1860. But he hoped to add another 122 metres during the ensuing year. (54)

**Warren Scheme: 1859**

During 1859 Warren drew up a much enlarged scheme for the harbour board which included a shield. This plan formed the basis of all work until the whole project was abandoned in 1867: (55) He proposed that a 152-metre shield be constructed at right-angles to the breakwater once it reached the 317-metre mark. Both structures were to be filled with stone. Once these were completed two 61-metre jetties would be built from the breakwater parallel to the shield. To further accommodate the handling of goods, the whole beach was to be reclaimed by a retaining wall at the low-water mark and a system of tramways laid. He was well aware of the problem which eventually helped render the whole scheme useless: (56)

The question of what is to be done with the river then arises. To meet this I widen the bridge and causeway connected and divert its course, by means of piling in the direction shown on plan A, carrying it through the
stone pier to the southward of the breakwater. This would obviate the silting up inside the works caused by the occasional "freshes," namely, the meeting of the river stream after rain at right angles with the dilatorial current.

The board submitted Warren's plan to the government in April 1860.(57) By May work on the breakwater was once again at a standstill because of the lack of piles. Only 44 metres had been added since January.(58) Meanwhile the municipal commissioners gave permission for the harbour board to build a passenger bridge from the breakwater approaches to the road south of the Baakens bridge.(59) Work was also started on reclaiming the beach south of Salmond Street.(60)

The highlight of 1860 was Prince Alfred's fleeting visit to Port Elizabeth in August:(61)

And here we must really be allowed a line or two to compliment the Harbour Board upon the very satisfactory arrangements they had made for the Prince's reception. The promenade had been widened and neatly planked. A crimson cord, extended from end to end of the Breakwater, served as a handrail on each side. A neat and convenient set of steps had been made for the occasion - which are henceforth to be called THE PRINCE'S STAIRS.

Patent Slipway Scheme: 1860

Meanwhile, J C Chase, impressed by the recently completed Simon's Town slipway, had taken the opportunity to approach the marine engineer involved, Robert Mair, during 1860 about a similar project in Algoa Bay. Chase believed "that the Fishery Point, the old whale establishment, belonging to my family, which I now regret has been sold, would afford a position equally favorable as Simon's Bay, for the construction of a Patent Slip."(62) Mair had replied that "I have no doubt that a very superior article could be put down at Port
Elizabeth for considerably less than has been expended here." (63) As a result the harbour board was induced to invite Mair to Algoa Bay. Local opinion, however, was much divided on the practicability of the scheme. (64)

Mair arrived towards the end of October 1860. After three weeks of investigation and "mature deliberation" with the aid of a harbour board sub-committee, he sent in a "most favorable report". (65) Their findings, together with a small model of the proposed scheme, were placed in the library for public inspection. (66) The investigation was made easier by the fact that William Fleming (junior) had kept a daily record of shipping since 1856, "which alone (gave) . . . nearly all the information required." (67)

Mair believed that a 244-metre slipway costing £19000, capable of taking ships of up to 2000 tons, would be fully justified. From 1856 to 1860, 52 vessels had put into Algoa Bay for repairs. Of these 37 called during the winter months - May to August - 21 during June alone. Although 34 had been repaired, the other 13, with an average of 763 tons each, had been condemned. During 1858-59 alone, "42 vessels ran past this port, after endeavoring in vain to weather the Cape, and made for Mauritius, all requiring repairs." In addition, regular traders of 350 tons apiece made up 42% of Port Elizabeth's shipping traffic. (68)

It was estimated that ships would be able to be put on the proposed slipway during 150 days of the year or on three out of every seven days. Two sites at the Fishery were found to be equally eligible and soundings had been taken at both. Mair preferred the one a little to the north of the Shark River. The rock formation there would form a natural foundation and a quarry could be opened in the nearby hill. The Swartkops River was rejected because the removal of the bar there would exceed the cost of the slipway itself. A site inside the breakwater was also rejected. Apart from the problem of shifting sand, a slipway there would interfere with the intended landing facilities.
The scheme was scuttled by another Simon's Town slipway engineer, G W Onions: (69)

I have...been permitted to peruse the evidence...[but it] is confined chiefly to the question of 'swell,' 'lift,' 'current,' and prevailing winds. Upon the question of the most vital importance (the nature of the bottom of the Bay...) so little evidence was elicited, and that of such an indefinite kind, as to have appeared quite an unnecessary ingredient...

That the bottom of the Bay at the Fishery is rocky and unsuitable I have no other means of determining but by the reported evidence... From this testimony [and additional reports from the harbour master and resident engineer], I can have no hesitation in concluding that the selected site at the Fishery is in every sense unsuitable for the reception of a Patent Slip, and that such an undertaking would be of necessity a decided failure.

Thus "the commissioners regretted that they were not now in a position to entertain the subject of a Slip" and the scheme was quietly forgotten. A similar scheme, however, was actually constructed and eventually brought into operation in 1903. [70]

"The question of improving our present barbarous, expensive, and dangerous mode of landing passengers and goods" had always drawn the attention of all and sundry. (71) Onions was no exception. While reporting on the slipway, he took the opportunity to propose a floating jetty as the possible solution to Port Elizabeth's problems. (72) Supporters of the idea pointed out they were common in America, France and "may be seen at every wharf lining the river Thames". (73) To keep the many sceptics at bay, Onions mathematically demonstrated that a floating jetty could withstand the force of a southeast gale. (74)
Progress and the Harbour Board:

During 1860 the board applied to government for the number of its members to be increased from five to seven as it was often impracticable to raise the required quorum of three.[75] This move was heartily supported by sceptics of the whole scheme, who occasionally, with great venom, aired their grievances against the slow progress, the commissioners and the wharfage dues. The harbour board was accused of having no fixed plan and spending large sums of money without achieving very much:(76)

Every engineer who has visited the works condemns the same as so much money thrown into the sea...and yet...so much is collected, in the shape of wharfage dues for the improvement of the Port Elizabeth Harbour Works. I think that is a misnomer, and should be for the greater "destruction of improvement."

The writer went on to point out that the board, for all practical purposes, consisted of two members, one of whom was preparing a trip home to Germany. Of the other three, one was dead, another was dying and the third was "in search of Separation".(77) Thus there was an urgent need to reorganise the board by "the appointment of some fresh blood and additional members". It was also suggested that Andrews be requested to come to Port Elizabeth and give some much needed advice.

The harbour master, Lt H G Simpson (1855-65), was appointed to the harbour board in May, to replace A Wares who had died.(78a) The next month the board was warned by the town clerk that it was damaging Union Street by dragging piles along it. The board replied that it had been unaware of this and would effect repairs if it was necessary.(78b) The board's major problem, however, remained the regular supply of timber piles. Despite frequent tenders being called for their transport, work continued to be hampered by their shortage.(79) As a result, from August 1861 pile driving had to be suspended, a mere 7 metres from where the shield was to be started. Up to then 60 metres had been added and 300 piles driven. All the lower permanent walings, however, had been fixed. The water was 7,5
metres deep at high tide at the end of the breakwater which now extended 339 metres out to sea. (80)

Meanwhile, the governor refused to allow convict labour to be employed on the scheme as there were "more demands for convict labour than he is in a position to entertain". (81) Despite the fact the harbour work was "peculiarly adapted to that description of labour". (82) This was again seen as discrimination: "our enlightened and liberal-minded (?) Executive can find plenty [of convicts] to assist at the Cape Town Harbour Works, even going to the expense of removing them from the Eastern Province - robbing the East, in fact, of its own rogues". (83)

To fill-in or not to fill-in:
Towards the end of 1861 the harbour board eventually took the fateful decision to fill-in portions of the breakwater with stone: (84)

The commissioners were anxious to have had the concurrent opinion of some eminent marine engineer on this portion of the work, on account of the consequent large increased expenditure; but no one of sufficient local knowledge being available in the colony, they have acted upon their past experience, based upon very careful and constant observations.

Permission was thus obtained from St Mary's church to open a quarry in their burial ground and work began in November. A set of signals was erected in Union Street to warn the public when stone trucks would be running down from the quarry. In addition the tramway was put out of bounds because trucks would "be constantly passing at great speed". (85) By the end of the year 4000 tons of stone had been deposited in the sea. The board soon took the opportunity to supply ballast to ships from a depot they constructed at the end of the breakwater. The charge via the various boating companies was 4s 6d a ton. (86)
Meanwhile the "turning point" was reached. There was much celebrating on April 17, 1862, when the shield's first pile was driven: (87)

The ceremony was performed by the chairman of the Board, W.M. Harries, Esq. After the ram had dropped upon the pile, a detachment of the Volunteer Artillery fired nine rounds, and...Champagne flowed freely... The weather was beautiful, and there was a large concourse of spectators present. The structure was decked with banners and flags, which lazily floated in the breeze. Altogether it was as good a piece of out-door excitement as we have had in Port Elizabeth for some time.
6.2 DOUBTS ABOUT THE SCHEME: 1862-67
The board was worried about their decision to proceed with the filling-in of stone. The process was expensive and would absorb a large part of the additional loans they had applied to raise. While asking the government to appoint an engineer to advise them on the matter, they justified the larger scheme: (88)

The original estimated cost of the Breakwater on the plan first submitted to the government was £30 000... but it must be borne in mind that this sum was but an approximate one the commissioners not having any professional aid to guide them; besides being based upon a plan on a much more diminutive scale to that which has been since adopted.

The board had found that since 1855, "the requirements of the port have been so largely developed, that had the original plan been carried out the accommodation intended to be afforded would have been utterly inadequate to its growing wants." (89) The number of ships on average in the bay had grown from 10 to over 25 "and at times amounted to between forty and fifty". Hence the breakwater had been materially extended to allow ships to dock and steamers to coal and water.

Andrews Report: 1862
Again, in July, the board asked "that some Marine Engineer, should confer with Mr Warren the Board's Engineer on the plans recommended for the construction and completion of the Breakwater at this port... The Commissioners have more than once submitted to the Government that they desired to avail themselves of the large experience of Mr Andrews the Engineer of the Table Bay Harbor of Refuge...[and] are more than anxious that this Gentleman should advise them, bearing in mind, as they do, that works of this nature are more or less experimental." (90)
The board's pleas were eventually answered when A T Andrews arrived at long last to carry out an inspection in the second half of 1862. His fee was five guineas a day plus travelling expenses. (91) Although "perhaps not quite so sanguine as to...[the breakwater's] ultimate general success as many who have greater local knowledge", Andrews's report was largely favourable. (92) He, however, contradicted the board's decision to begin filling-in with stone. He advised against it: (93)

I might give a decided answer upon this point. Considering that the current flows at times with great force in a northerly direction parallel with the beach, and that the action of the heavy swell in Southerly gales, is to draw back the sand and clean the beach down to the rock, I am of the opinion that sand would collect in the still water inside the jetty and breakwater which would in time form a dangerous shoal. Under these circumstances, I would strongly recommended that the jetty should be left as at present as far as the deposit of stone is concerned.

The rest of his report put forward minor alterations. He suggested that the shield be built 1° in a more easterly direction with slight alterations in design while the two jetties should run out from the shield and not the breakwater. Because of the suspension of filling-in, a locomotive would be unnecessary to haul stone from the quarry. Instead the loaded trucks running downhill could be harnessed to raise the empties. The THUNDERBOLT wreck, still within the shelter of the breakwater, would have to be removed. Finally, he recommended that the Baakens be diverted more than proposed.

He also stressed the importance of having a large scale plan of the area drawn up. "Unless this is done you will be working in the dark, and may someday discover that your works are causing outer shoals to grow up and the ruin of the present landing places". He ended his report by stressing that he had been over-cautious in compiling it: (94)
It is well known that all marine works have a certain amount of uncertainty attached to their success, when completed, it is therefore a serious matter in an undertaking, where the funds are limited, that no risk should be run, and that whatever works are executed at this port, they should not interfere with or damage the existing working places.

The governor immediately ordered a "statement of the view which the Commissioners take of Mr. Andrews's report", especially on the diversion of the Baakens.(95) There was also a hasty reply from the PE Telegraph to a Cape Town newspaper's editorial comments on the breakwater being "next door to failure". It was pointed out that the board had not relied on amateur engineers. Both Scott Tucker and Matthew Woodifield had been consulted. In addition, it was proving to be very useful because passengers were already using the breakwater stairs:(96)

He knows as well as we do, that "delicate women and bales of caftas" are not alike "exposed to a drenching in the surf, and to being shot like rubbish on the beach, or raised aloft on the nude brawny shoulders of athletic Fingoes, and carried thus in perilous and most awkward safety to terra firma".

Eventually Warren himself wrote a letter to the Argus in protest against their comments "to the effect that the confidence of the commissioners, and their 'non-professional engineer' is not materially shaken by the 'damming opinion'" contained in Andrews's report. He pointed out that the scheme was always only intended as a boat breakwater. In addition he had served the usual seven years articulated to an engineer and had since practised as one for 16 years.(97)
Harbour Board resignations:

In November 1862 the three most recently appointed harbour board members resigned because they "entertained grave doubts as to the efficiency of the works in progress". Alfred Ebden, J S Kirkwood and Henry Christian had been appointed five months previously when the board was enlarged under Act 15 of 1861. They strongly urged the harbour board to consult Andrews again before proceeding any further. Neither his published report, nor his personal explanation, had removed their misgivings of the whole scheme. After mature consideration they had come to the following conclusions:(98)

1. the cost of Andrews's modified plan would far exceed the board's resources;
2. the work in progress was of too experimental a nature to justify being continued;
3. even if the scheme was successful, the landing facilities would by no means justify the outlay;
4. the project could seriously damage the present landing beach which would be difficult and expensive to rectify.

"Our colleagues however with their Engineer Mr Warren, are still sanguine of success and see no discouragement in Mr Andrews's report... Under the circumstances we do not wish to be obstructive; but, naturally shrinking from the responsibility attaching to us so long as we continue members of the Board, have no other alternative than to request His Excellency the Governor to relieve us of our duties."(99)

The remaining members took exception to this condemnation of the whole project. They questioned the integrity of the three in accepting seats on the board if "prior thereto they entertained grave doubts, both as to the expediency and efficacy, of the works." Further, why had they agreed to the board's resolution on September 28 that the Andrews's report "be carried out as nearly as practicable with regard to the pier and shield"? To overcome the resignations, the governor was asked to appoint "gentlemen who will cooperate with
the present Commissioners in endeavouring to render the breakwater a great public good."(100)

Early in December the remaining members put forward the following names for the vacant seats: William Fleming, T W Gubb and Joseph Simpson. But they stressed that they were "far from desiring to interfere with His Excellency's power of nomination". (101) Unbeknown to them, the governor had simultaneously asked for their recommendations to fill the vacancies. (102)

Bourne Report: 1863
The fact that three harbour board members had resigned in protest against the breakwater scheme, prompted the governor to request another engineer to inspect the works for a second opinion. He was J F Bourne, the newly appointed inspector of railways, who had much experience of marine works, especially in Holland. He was to examine the scheme after he had completed an inspection of the country between Port Elizabeth and Grahamstown as to its suitability for a railway. (103)

Bourne inspected the works on March 10, along with Warren and the acting harbour master, G Wilson. Unlike Andrews, he felt that the main pier should be filled with stones. But this should be a gradual process, starting at the elbow [104] and continued towards the shore for about 150 metres, "when it will be seen by its effect, whether it be advisable to carry it still further towards the shore". (105) He, however, felt that about 100 metres would have to be left open at the land end of the breakwater. Otherwise he feared "that so much silting will take place, on the inner or harbour side, as to produce a very obstructive shoal". (106)

Bourne's major reason for filling-in the main breakwater with stone was that some of the piles had been attacked by sea worm. Thus "the stability of the work will depend upon the size and weight of the stones employed". He further reported that:
1. the present scheme would fulfill the purpose the harbour board required it for ie loading facilities for surfboats and a place for passengers to land;
2. the shield should be filled with stones as soon as possible to achieve this purpose without delay;
3. the facings exposed to the sea should be lined with stone.

Eedes Scheme: 1863
Meanwhile a totally different scheme was proposed by J Eedes (Snr) of Grahamstown who went as far as putting his idea to both houses of the Cape parliament:

In making reference to a matter which has hitherto baffled the most energetic, I do not scruple in stating, with reference to Algoa Bay, that it is also practicable so to construct, and carry out seaward, by degrees from the beach, at or near the old Fishery, an immovable mass of the necessary material, constituting an inclined plane, upon which the rush of the ocean would ascend, and in doing so meet with so much gradatory resistance, that the sea in consequence would recede, and there would then be created an extensive plane of smooth water within.

The idea was supported by C Chapman of Port Elizabeth who believed the Kowie proved that fighting against nature did not pay. Whereas at the Fishery it "needs no great art to assist nature in forming an immovable barrier, when barriers on a small scale are of themselves forming daily". He went on to point out that it could be built "with much less expense than we are going to now, only to spoil our beach and make the community giggle". The idea, however, was given short shrift by the editor of the Herald. "There is nothing definite about the proposal, and we cannot entertain the slightest idea that the Houses of Parliament will listen to anything so vague... If Mr. Eedes would be a little more practical, and speak or write more to the point, something might come of it".
Filling-in:
In his report for 1863 Warren noted that the shield had been extended by 88 metres during the year. Only 330 piles were driven because of difficulties in transporting piles from Knysna and Plettenberg Bay. About the same number again would be needed to complete the pile work. Bourne's recommendations had been carried out as nearly as possible provided they were consistent with the original design. The tramway from the end of the breakwater to the quarry was completed in September. But, because of delays in getting iron work for the trucks, work on filling-in only began early in 1864. About 100000 tons of rock would eventually be needed. Some 30000 tons were already deposited or had been quarried and were ready for removal. More importantly, Warren noted that:

No perceptible alteration has taken place in the depth of water on the inside or outside of the breakwater, the soundings giving the same mean results as those formerly taken.

In accordance with Bourne's recommendations, 122 metres of the breakwater was filled-in with stone during 1864. Some 29000 tons of rock were deposited, including 12000 tons of large rock used in a parapet wall along the seaward side of the structure. About two-thirds of the shield's stonework was completed by the end of the year. But as filling-in of the breakwater progressed, the silting of the inner basin began. As a result it was deemed expedient to adopt the original plan to fill-in the breakwater completely, from shield to shore, with stone. Warren confidently reported:

I have no hesitation in saying that if this latter plan be carried out, the water inside the work will be completely protected, and the silting up effectually arrested; but I am nevertheless of opinion that a steam dredge will afterwards be required to remove any deposit of dirt or sandbanks that may occasionally be formed through heavy seas and gales of wind.
To speed up the project the shield was stopped short at the 113-metre mark. Thus only 20 more piles remained to be driven. During the year 190 had been put into place, including intermediate ones in the breakwater. Water was laid on to the end of the breakwater from the Shark River scheme. Now ships could obtain "an inexhaustible supply of wholesome water at any moment and upon reasonable terms."(113) On the negative side, the lifebuoy and line on the breakwater was stolen during March. The board offered a £2 reward for information leading to the conviction of the culprits.(114)

The governor toured the works in January 1864. Each time Bourne visited Port Elizabeth, he "noticed with interest and satisfaction the progress of the Harbour Works". (115) In May he "most favourably expressed his opinion thereon". (115) Meanwhile, the ultimate success of the tramway at the works was a personal triumph for Warren. Because Andrews had been against his way of implementing it, Warren had "had to personally guarantee to the Board that his plan would work". (117)

Increased silting:
By early 1866 Warren was able to report that the breakwater and shield were "now nearly finished; two or three months will suffice entirely to complete them". (118) But "it will be necessary, in order to bring these works into use, that they be connected by some means with the beach front called 'Custom-street.'" He felt that a dredger would definitely be necessary to maintain the inner basin. As yet it was "but slightly affected by the deposit of sand, but the beach both north and south of the breakwater is continuing to encroach towards this anchorage, and measures should be devised to arrest its progress." (119) Pending a decision on future plans, work on the parapet was suspended at the point where the spur of encroaching beach had developed around the base of the breakwater, 216 metres in from the elbow. (120)
Bourne's opinion on silting: 1865

The harbour board had already asked Bourne's opinion on the problem of silting. He felt that:

The silt has been deposited in the basin as a natural consequence of the production of still water in the basin by the filling in of the shield and jetty.

If the jetty had been left as open as possible, but if the shield had been filled in, the silt would still have been deposited, though more slowly, and in a different position...

And it is needless to say that if the jetty had thus been left unfilled with the stone for its whole length, the prime object of the breakwater would not have been attained. It would no longer have formed a harbour for small craft.

On this account, in my report... in March 1863, I recommended the filling in of the jetty to be proceeded with tentatively, so as to be discontinued if necessary.

The Commissioners and Mr. Warren, the engineer, I am informed, agreed, whilst this filling in was in progress, that it was necessary, in order to lessen the deposit, to fill in the whole jetty up to the shore. And the result is said to be favourable. I am inclined to think, however, that the greater or less deposit at various times may have been produced by the prevalence of winds from different quarters, and I should have been disposed to have tried for some length of time the effect of leaving open a few hundreds of feet of the jetty near to the shore.

But in any case the deposit is a mere question of time and degree; and I would not on any account advise you to attempt to remove the intermediate piles and the stone already deposited.

In addition to leaving the stonework be, Bourne felt that eventually it might be necessary to build a light wall in the jetty hearting to
stop sand in suspension percolating through. Because there was no current in any direction with sufficient scouring force to remove the sand, he reckoned that a dredger would "be the most valuable and effectual remedy". One capable of raising 500 tons a day from a depth of 6.7 metres would be sufficient. He foresaw no reason why the works could not be brought into operation within a few months. The 14-metre wide deck was sufficient for "a double line of railway of 4 feet 8½ inches gauge". Bollards and moorings in the proper positions would at once enable vessels of a moderate draught, and all cargo boats, to discharge alongside the shield and far end of the breakwater. (122).

But of more importance to the immediate future of the works, Bourne made the fateful recommendation that the Baakens need not be diverted to the south of the works as originally planned. He recommended that a stone rubble wharf wall be built from the breakwater to the small jetty in front of the customs house. It was to start 216 metres in from the elbow, at the point on the breakwater where the spur of encroaching beach had reached. "An opening in this wall for the discharge of the water of the Baaken's River, and a straight training-wall on each side of that river, would increase the wharfage space". (123)

He rejected Warren's proposal that a jetty be built, at right angles to the breakwater, over the wreck of the THUNDERBOLT. He wanted it blown up and removed as soon as possible to make room for the dredger and encourage the full sweep of current during a southeaster. His wharf wall would be more useful than a THUNDERBOLT jetty. He cautioned against any projections into the basin from the south or east as they would only encourage silt. In the long term, as traffic increased, he suggested that the shield could be extended and a solid breakwater be run out from near the customs house so as to form an enclosed basin. (124)
Alternative Warren Scheme: 1866

Warren submitted an alternative plan to the harbour board on January 2. (125) He went further than Bourne had suggested. He proposed canalising the Baakens to open up the lagoon as wharfage space for surfboats. Apart from the retaining wall along the Baakens at its mouth, he envisaged an iron swing bridge at Union Street. A lock with gates and sluices would not only open the lagoon but would also be a sanitary improvement. His £46000 estimate did not include deepening the river which would enable boats to enter at any tide. The plan was subsequently submitted to the municipality who rejected it as being on "too expensive a scale for the town to afford it in its present embarrassed position". (126)

By early 1866 large vessels of up to 500 tons were using the inner basin despite the fact the breakwater was designed for ship's boats. (127) The way had been led in January by the French ship CALCUTTA which moored within the shield to speed up discharging so that urgent repairs could be done. (128) The opportunity was taken to ridicule the sceptics: (129)

There are croakers...who assert that the interference with the usual currents along the beach by the breakwater will cause a sanding-up inside, that in course of time there will be no water within the shield, and that the labour and money spent upon the works is so much thrown away...

The editor of the PE Telegraph went on to suggest that silting was not a problem. He felt that a possible solution would be to build an inner, parallel shield. It would act as a barrier to sand encroaching from the beach and provided extra wharf space. The basin could be dredged and, if necessary, dock gates fitted. He estimated the cost to be about £10000. An added advantage was that men would be kept in work during the current depression.

Meanwhile, Warren, resident engineer since the breakwater's inception, resigned. (130) He left for England with his family in
March. The board, in recognition of his "zealous services in the execution of his duties" presented him with a £50 present and extracts from the various favourable reports of the works by visiting engineers. (131) Ninety-six of the board's workmen thanked him for "the courteous and gentlemanly manner" in which he had treated them. (132)

Pfeil Scheme: 1866-67

He was replaced by F M Pfeil whose immediate task was to find a solution to the silting problem. Shoaling in the inner basin was taking place at the rate of 61 centimetres a year. At low spring tide the average depth had declined from 4.02 metres in 1864, to 3.43 metres in 1865, to only 2.84 metres in 1866. (133) A possible cause was suggested as to why driftsand was encroaching over the Walmer commonage and making the harbour board's task all that more difficult. A half century of increasing human presence had taken its toll on the ecology of the region. Initially the underlying sand had been sufficiently covered by natural vegetation not to be affected by the wind. But increasing population, cattle and bushfires resulted in growing bare patches. These became self perpetuating by providing sand to bury the remaining vegetation. (134)

By mid-1866 the breakwater's decking and timber superstructure had been completed from the elbow as far as the encroaching spur. The remaining 88 metres to the stonework were left incomplete in case Bourne's proposed sea wall was built. (135) The harbour board reported the completion of the works but requested a further £25000-30000 "in consequence of the urgent necessity that exists for further works, in order to obtain the full benefit of what has already been done". (136)

Pfeil's plans were submitted to the government and passed on to Bourne. Because they were in accordance with his 1865 suggestions, he in general had nothing against Pfeil's proposals. The only thing he strongly objected to was the proposed construction of landing jetties within the basin: (137)
Any construction of this description whether made from the wharf wall along the shore, or from the breakwater or, most of all, from the inside of the shield, must inevitably increase the evil tendency to silt up the harbour within the breakwater.

In addition the jetties would obstruct a dredger. A remark at the end of Bourne's comments on the Pfeil's scheme resulted in fateful consequences for the whole project: (138)

I am sorry that the Baakens River is being carried to the southward of the Breakwater. It should be confined between wharf wall as proposed in my report...

Pfeil incorporated this and the objection against jetties into a revised scheme. The result was a £40000 plan which he claimed would keep the inner basin clear "with a certainty that no other plan can lay claim to." (139) In fact it was merely a more detailed version of Bourne's 1865 suggestions. Canalising the Baakens was seen as the only way to save the whole project. Especially since the following disclosure had been made about the breakwater: (140)

owing to the height of the works above the water necessitating craning, it could never be made available for cargo boats, except at a great expense by means of dwarf inclined jetties from the work, as proposed by Mr. Andrews...

Because these would speed up silting, the only way to provide wharfing facilities was to open the Baakens. The Herald rationalised in the following way: (141)

After spending some £120,000 on the present Harbour Works, which have so far succeeded as to prove that large vessels can be repaired within the shield, it would be clear insanity to think of abandoning them, more especially as all engineers are agreed that no
modification of the present breakwater, with the prevailing currents, could have prevented its gradually silting up, unless dredging were resorted to...we regard the construction of the proposed sea-wall almost a sine qua non to arrest the sand, and indicate the work to be done.

Pfeil's scheme provided 152 metres of wharfage space on either side of a canal at the mouth of the Baakens. It would also prevent the river contributing to the silting problem. After initial dredging, flood gates were to be installed at the upper end of the 24-metre wide canal. By opening them periodically, the resultant flushing would maintain a depth of 2.1 metres at low tide. The curved sea wall would "establish a scour at its foot, and thus arrest the deposit of sand...as it has done along the face of the Municipal sea-wall,[142] where the current meeting the wall has been deflected and swept the rocks in front bare of sand."(143) Pfeil, however, disputed Bourne's suggestion that the sea wall itself could be used as a wharf. Incoming rollers dashing against it made this impossible even under the lee of the breakwater except in very good weather. The estimated cost of the canal was £17000, the dredger £10000 and the sea wall £13000.

But the whole object of the breakwater had changed from it forming a small boat harbour to it providing protection for ships undergoing repairs. It was felt, however, that the latter ability spoke "volumes in favour of the facilities offered by the basin of the Breakwater".(144) Although the revised plan was submitted to the government, the harbour board was still uncertain what to do. So it decided to confine itself to importing a dredger:(145)

As regards a plan to provide jetties or other facilities for landing and shipping purposes, the Commissioners being of opinion that the subject requires more mature consideration, do not propose to take any action therein for the present, nor without the entire sanction of the government.
Annexures to Votes and Proceedings of Parliament (A5/1867)
Delayed implementation of Pfeil Plan: 1867

The governor, however, would not raise the matter in parliament until a detailed plan was provided.(146) A plan was duly dispatched during March 1867 which was identical in principle to the August proposals. Pfeil stressed that "the success of any portion of the proposed scheme, is dependent upon the carrying it out as a whole".(147) In addition he felt that the diversion of the Baakens's was "becoming every month a more pressing necessity, the present small outlet being now kept clear by occasional manual labor, and whether it be carried out to the Southward, or into the Harbour by the canal...a large expense must be entailed, but which is included in the £40,000".

The governor again delayed things. This time he wanted to know how the board intended to finance the interest on any loans raised under parliamentary sanction.(148) Finances aside, Pfeil's plan was given the stamp of approval by Andrews.(149) As these negotiations were going on, a storm lashed Port Elizabeth on March 25, giving it a taste of things to come. Almost 30 millimetres of rain fell in 90 minutes. "All the narrow avenues from the Hill...were converted into running streams; and as the water went gurgling and bubbling down the Main-street...in the direction of the beach, it carried with it sand, rags, tins, and a large quantity of other refuse".(150) This time damage was limited to properties along the beachfront.

While the new bill passed through parliament, the Baakens was dammed up to allow harbour work to continue. The resultant stagnant water led to fears of malaria "which might scourge us as the swamp-fever has decimated Port Louis".(151) It was noted, however, even "in its incomplete condition, the Breakwater and Shield has given us a tolerably secure landing place where goods and passengers can be embarked or disembarked in almost all weathers. This alone is a great boon to the place. Formerly the shipping business of the port was interrupted for days at a stretch. Now interruptions are very rare, and never exceed twenty-four hours."(152)
After the Port Elizabeth Harbour Loan Act was passed during August 1867,[153] it was announced that the harbour board would take on extra hands thus alleviating "the existing distress among the labouring classes in this town, many of whom now find it difficult to procure even partial employment".[154]

At the same time that parliament enabled the harbour board to raise finance for the Pfeil scheme, doubts about the feasibility of the new scheme had emerged. Towards the end of August the board requested Andrews to inspect their works and "report such suggestions or alterations as may be considered best adapted to ensure the success of the Breakwater".[155] But he unfortunately could not be spared from the Table Bay project.

In the second half of 1867 everything began to go wrong. Heavy rain saw the Baakens break through the sandbar into the basin on September 13 depositing about 30 centimetres of silt in the basin.[156] As a result the governor informed the board that it was unadvisable to proceed with Pfeil's scheme "without good professional advice". He therefore wanted to know what they were "prepared to do in this contingency".[157] The board decided it was imperative that the advice of a competent marine engineer be sought.[158] But this was a separate issue to the urgent need for prompt action. Already the non-implementation of Pfeil's scheme since March, had resulted in more silting, rendering "that Plan useless, unless it be modified to suit the altered condition of the Beach".[159]

Although a select committee was appointed to report on the "Eastern Harbour Works", it confined itself to considering whether the government should take over the Port Alfred works from the Kowie Harbour Improvement Company which was deeply in debt.[160] Thus the harbour board found itself in a Catch-22 situation. On the one hand, while the governor had vetoed the implementation of the Pfeil scheme until an expert had been consulted, the board was unable to find anyone to give advice. On the other hand, the longer things were delayed the less chance there was of the Pfeil plan succeeding.
FOOTNOTES:

1. CO 5317 No 1137 27/11/1855 - govt sec to PEHB sec, FWD 1/784 28/11/1855 - govt sec to asst eng
2. CO 5317 No 1190 13/12/1855 - govt sec to PEHB
3. G9/1856 pp 2-7 - 1855 PEHB report
4. CO 660 28/12/1855 - admiralty surveyor to naval commander-in-chief, CO 5317 No 4 5/1/1856 - govt sec to PEHB
5. G9/1856 p 4
6. CO 683 No 8 1/2/1856 - govt sec to PEHB
7. G9/1856 pp 2-7 - 1855 PEHB report
8. EPH 4/3/1856 p 2
9. EPH 20/5/1856 p 1, 12/8/1856 p 1. The plans had been sent to Cape Town for approval in February - CO 5317 No 361 5/4/1856 - govt sec to PEHB sec.
10. PWD 1/788 No 18 25/7/1856 - PE asst eng to PEHB sec
11. G14/1857 p 1 - 1856 PEHB report
12. PWD 1/788 No 12 20/5/1856 - PE asst eng to govt eng
13. PWD 1/784 10/6/1856 - govt eng to PE asst eng
14. Initially Warren's position was "clerk of the works" but by 1859 he had become "engineer and superintendent of the breakwater".
15. PWD 1/788 No 16 12/6/1856 - PE asst eng to PEHB sec
16. PWD 1/784 16/6/1856 - PEHB sec to PE asst eng
17. PWD 1/784 9/8/1856 - Harries to PEHB sec. See illustration.
18. PWD 1/788 No 25 27/8/1856 - PE asst eng to PEHB sec
19. CO 5318 No 390 1/9/1856 - govt sec to PEHB sec
20. G9/1856 pp 2-7 - 1855 PEHB report
22. EPH 25/11/1856 p 3 - letter from "Daniel Doyce"
23. EPH 25/11/1856 p 3. The THEMIS was eventually scrapped and its hull, equipment and 2 tons of copper sheathing sold - EPH 10/2/1857 p 1, 9/6/1857 p 1.
24. PWD 1/788 No 51 19/11/1856 - PE asst eng to govt eng
25. PWD 1/784 5/12/1856 - govt eng to Tarbult
26. PWD 1/784 13/12/1856 - PEHB sec to PE asst eng
27. G14/1857 p 1
28. PWD 1/784 13/5/1857 - Orgill to PEHB sec
29. PWD 1/788 No 113 14/5/1857 - PE asst eng to PEHB sec
30. PWD 1/788 No 123 27/6/1857 - PE asst eng to PEHB sec
31. PWD 1/784 30/6/1857 - PEHB sec to PE asst eng
32. PWD 1/788 No 141 17/8/1857 - PE asst eng to PEHB sec
33. PWD 1/788 No 251 9/7/1857 - actg PE asst eng to PEHB sec
34. EPH 25/8/1857 p 1, 25/12/1857 p 2
35. EPH 26/2/1858 p 3
36. PWD 1/788 No 162 5/10/1857 - PE asst eng to govt eng. Woodfield was replaced by John Rogers until he returned in November 1858 - PWD 1/788 No 163 5/10/1857 - PE asst eng to govt eng, No 290 11/11/1858 - PE asst eng to govt eng.
37. EPH 27/10/1857 p 2. Helmore's widow, Mary, lodged a civil case against Warren for £500 or an annuity of £50 in compensation. She was awarded £200 damages and the judgement was upheld on appeal - EPH 2/4/1858 p 3, 10/9/1858 p 2.
38. The harbour board was willing to send £200 towards expenses incurred seeking British workers. But the money was delayed because of their uncertain financial position. As a result by
December nothing had come of the British recruitment drive through no fault of the emigration board - EPH 10/12/1858 P 3. Eventually in May 1859, 38 men and their wives arrived in Port Elizabeth - EPH 31/5/1859 P 4. They were housed in 10 artisan's cottages south of the Baakens that the board had earlier called tenders for - EPH 15/4/1859 P 1. By August two of the contracted Englishmen, Philip May and Richard Stitson, had absconded - EPH 2/8/1859 P 1.

39. EPH 26/2/1858 p 3
40. PWD 1/788 No 264 17/8/1858 - actg PE asst eng - PEHB chairman. EPH rather optimistically corrected a PE Mercury report of 25 piles a day being driven, to 250 - EPH 20/8/1858.
41. PWD 1/788 No 284 14/10/1858 - actg PE asst eng to PEHB chairman
42. EPH 23/11/1858 pp 1 & 4
43. EPH 29/1/1861 p 4
44. PWD 1/788 No 296 20/11/1858 - PE asst eng to PEHB sec
45. PWD 1/788 No 324 22/12/1858 - PE asst eng to PEHB sec
46. EPH 17/12/1858 p 2
47. G42/1860 p 2 - 1859 PEHB report
48. EPH 15/2/1859 p 2
49. CO 743 No 47 9/5/1859 - PE town clerk to govt sec: enclosure
50. ibid: note dated 19/5/1859, EPH 31/5/1859 P 3
51. CO 4405 23/5/1859 - Andrews to govt sec, EPH 3/6/1859 P 3
52. a. EPH 14/10/1859 p 2. b. G42/1860 p 2.
53. EPH 25/10/1859 p 1, 29/11/1859 p 1
54. G42/1860 p 2
55. ibid pp 2-3. See plan of Warren scheme.
56. ibid p 3
57. CO 766 No 71 27/4/1860 - PEHB sec to govt sec: enclosure
58. EPH 18/5/1860 p 2, 15/6/1860 p 3
59. EPH 1/5/1860 p 3, G28/1861 p 2 - 1860 PEHB report
60. EPH 15/5/1860 p 4
61. EPH 10/8/1860 p 2
62. EPH 28/9/1860 p 2
63. ibid p 2
64. EPH 16/10/1860 p 2
65. The harbour board sub-committee consisted of: Warren, Simpson, Harrington, Francis, Fleming (Jnr), Wilson and Frames.
66. EPH 16/11/1860 p 3, 20/11/1860 p 2
68. 1857-59: 110 regular traders out of 260 ships calling at Port Elizabeth annually - Mair's report.
69. EPH 12/4/1861 p 4 - report of PEHB ordinary meeting on April 5
70. See PEHB reports 1895-1903
71. EPH 9/4/1861 p 2
72. EPH 12/4/1861 p 4
73. EPH 9/4/1861 p 2
74. EPH 10/5/1861 p 3
75. G28/1861 p 1. The number of commissioners was increased to seven under Act 15 1861 (14/8/1861) which enabled "the Governor to increase the Number of Harbour Commissioners appointed under Ordinance 21, 1847".
76. EPH 10/5/1861 p 3 - letter from "ONE WHO PAYS WHARFAGE DUES"
77. ibid p 3
78. a. ibid p 3. b. EPH 11/6/1861 p 3.
79. EPH 22/2/1861 p 1, 17/5/1861 p 2, 13/8/1861 p 1  
80. G16/1862 - 1861 PEHB report p 2  
81. CO 783 No 181 7/8/1861 - PEHB sec to govt sec  
82. G16/1862 p 2  
83. EPH 16/1/1862 p 2  
84. G16/1862 p 1  
85. EPH 29/10/1861 p 1  
86. EPH 14/2/1862 p 4. Ballast sales were only responsible for 1% of the harbour board's revenue from 1862-70. See Table 14.  
87. EPH 22/4/1862 p 3  
88. CO 801 No 101 3/5/1862 - PEHB to govt sec (printed as G38/1862)  
89. ibid  
90. CO 801 No 140 24/7/1862 - PEHB sec to govt sec  
91. CO 5327 No 875 16/8/1862 - govt sec to PEHB chairman, G43/1863 p 1 - 1862 PEHB report, EPH 16/9/1862 p 3  
92. G43/1863 p 3  
94. ibid  
95. CO 5327 No 1123 15/10/1862 - govt sec to PEHB sec  
96. PET 11/10/1862 p 2  
97. EPH 25/12/1862 p 3 - reprint of letter to Argus  
98. CO 801 No 217 20/11/1862: enclosure 4/11/1862 - Ebden, Kirkwood and Christian to PEHB chairman  
99. ibid  
100. CO 801 No 217 20/11/1862 - PEHB sec to govt sec  
101. CO 801 No 228 12/12/1862 - PEHB sec to govt sec  
102. CO 5327 No 1336 13/12/1862 - actg govt sec to PEHB chairman  
103. CO 5327 No 177 21/2/1863 - govt sec to PEHB chairman  
104. Elbow = right-angle where shield joined breakwater  
106. ibid  
107. EPH 3/2/1863 p 3 - letter to editor; 24/4/1863 supp p 1 - reprint of address to parliament  
108. EPH 6/2/1863 p 3  
109. EPH 24/4/1863 supp p 1 - editor's note  
110. G41/1864 p 2 - 1863 PEHB report  
111. The parapet wall, constructed of stone blocks from 2-8 tons, was 6.7 metres thick and extended to 1.8 metres above the highwater mark - EPH 17/5/1864 p 3.  
112. G50/1865 p 2 - 1864 PEHB report  
113. ibid p 3  
114. EPH 29/3/1864 p 1  
115. G43/1864 p 1  
116. G50/1865 p 2  
117. EPH 17/5/1864 p 3  
118. G22/1866 p 2 - 1865 PEHB report  
119. ibid  
120. G14/1867 - 1866 PEHB report p 1  
121. G22/1866 p 4  
122. ibid p 5  
123. ibid  
124. ibid
125. PET 12/1/1866 p 3
126. ibid
127. G22/1866 p 2
128. PET 16/1/1866 p 2. After January 1866 the breakwater's berths were constantly occupied by up to three vessels, of between 400 and 600 tons, for repairs - G14/1867 p 2 - 1866 PEHB report. The CALCUTTA was able to leave the inner harbour at the end of March - EPH 27/3/1866 p 2. The barque ILVA (300 tons) arrived in August, was hove over within the shield and a new keel fitted by the shipwright, Kemsley, a colonial first. The work was done while the Australian MESSENGER (484 tons) and French VILLE DE CANNES (315 tons) were also in the basin - EPH 7/8/1866 p 2, 4/9/1866 p 3, 9/10/1866 p 3, 21/5/1867 p 2, 24/5/1867 p 2; PET 12/10/1866 p 2.
129. PET 16/1/1866 p 2
130. EPH 9/3/1866 supp p 1
131. EPH 7/3/1866 supp p 2
132. EPH 16/3/1866 p 3
133. EPH 9/10/1866 p 2
134. PET 4/9/1866 p 3 - letter from "Observer"
136. CO 862 No 133 22/6/1866 - PEHB sec to govt sec
137. CO 886 4/7/1866 - railway engineer to govt sec
138. ibid
139. EPH 9/10/1866 p 2, CO 862 No 203: enclosure 24/8/1866 - Pfeil's special report
140. EPH 9/10/1866 p 2
141. ibid
142. The sea-wall was the Victoria quay.
143. EPH 9/10/1866 p 2
144. ibid p 3, EPH 12/10/1866 p 2
145. CO 862 No 203 14/9/1866 - PEHB sec to govt sec
146. A5/1867 p 1; CO 878 No 95 15/3/1867 - PEHB sec to govt sec; EPH 21/6/1867 p 3
147. CO 878 No 95: enclosure 11/3/1867 - works engineer to PEHB chairman
148. A5/1867 pp 3-5
149. PET 5/7/1867 p 2
150. EPH 26/3/1867 p 3
151. EPH 7/6/1867 p 2
152. PET 5/7/1867 p 2
153. Act No 14 1867 (16/8/1867) - An Act to Enable the Harbour Board at Port Elizabeth to raise a further Loan of Forty Thousand Pounds, and to provide for keeping down the Interest thereof
154. PET 2/8/1867 p 2
155. CO 887 No 246 21/8/1867 - PEHB sec to govt sec
156. G2/1868 p 2 - 1867 PEHB report
157. CO 5332 No 1068 21/10/1867 - govt sec to PEHB sec
158. CO 887 No 291 6/11/1867 - PEHB sec to govt sec. It was only after the disastrous November 1867 flood that the crown agents in London were approached about looking for someone suitably qualified to act as a consulting engineer - 22/11/1867 note on CO 887 No 291.
159. CO 887 No 291: enclosure 5/11/1867 - PEHB meeting minutes
7. ABANDONMENT
7. ABANDONMENT: 1867-70

7.1 BREAKWATER ABANDONED: 1867-69

The Great Storm: 1867
All doubts about the whole breakwater scheme became harsh reality when Port Elizabeth was lashed by a storm for three days starting on Tuesday, November 19, 1867. During 11 hours on the Wednesday and Thursday, 161.5 millimetres of rain fell bringing the total for the three days to 225.5 millimetres. "This was something quite unprecedented in the history of Port Elizabeth, and we believe we may say in the history of this colony."[1] While only two lives were lost, damage to roads and houses alone was estimated to be as much as £30000.(2)

The PE Telegraph reported that:(3)

The Baaken's River came down with terrible force... Passing the bridge, the water cut its way through about thirty yards [4] of sand which it swept with it to the breakwater, where it is at present lodged, adding an unexpected and formidable difficulty to the efforts of the Harbour Board to deepen its basin.

The Herald recorded that:(5)

Within the shield of the Breakwater there was also much destruction. Not fewer than twelve boats sunk at their moorings, filled with water by the rain and sea... The tramway bridge erected by the Harbour Board...was also carried away by the fury of the storm... The Beach speaks with terrible eloquence of the roughness of the storm...large craft rode it bravely out... But a number of small craft sunk at their moorings within the Breakwater, having been actually swamped by the force of the rain...
BREAKWATER (1866)

Port Elizabeth Public Library

BREAKWATER AFTER THE NOVEMBER STORM (1867)

Redgrave (1947) p 240
SOUTH END STREET AFTER THE NOVEMBER STORM (1867)

Redgrave (1947) p. 75

WHITE'S ROAD AFTER THE GREAT STORM (1867)

Redgrave (1947) p 223
The whole silting problem was brought to a dramatic climax overnight when the inner basin was rendered useless. An average of 1.37 metres of silt was deposited. The 1.37 metres of water that remained was no longer sufficient for the type of vessels that had made use of the basin during the previous 18 months. (6) Since the first soundings were taken in 1864, the average depth at low spring tide had decreased by 2.65 metres or 66%. The November flood alone had contributed 52%. (7) Thereafter the depth remained relatively constant.

The outer shoal emanating from the end of the shield, as predicted by Andrews in 1862, had made its appearance and continued to grow. It was created by the meeting of the slight inner basin current, caused by the shield, and the incoming rollers. The phenomenon had only been noticed during 1867 but was not seen as a major problem because it was believed dredging would take care of it. (8) It was, however, causing sufficient water disturbance to swamp boats. After the storm Pfeil reported that it would be comparatively useless to attempt to dredge whilst the beach and river outlet are left in their present state. (9) He still believed that a constant depth of inner basin water could be maintained if his plan was immediately implemented. The harbour board, however, suspended all work proposed under the plan, "pending the advice and opinions of some competent marine engineer", whose assistance they now sought. (10) They therefore decided to confine their activities to maintenance.

Coode appointed consulting engineer: 1867
In a classic case of closing the stable door after the horse had already bolted, immediately after the flood the government made moves to find a suitable marine engineer in England. (11) The crown agents in London approached an eminent marine engineer, John Coode, on the matter but he found that the available information was insufficient: (12)

although they contained matters of detail, both of works executed and proposed, the documents received do not supply such information bearing upon the various
physical features of this part of Algoa Bay as will enable me to determine the principle upon which works of improvement may be safely undertaken. (13)

He therefore recommended that a competent engineer be sent from England to gather all the necessary data so that a proper opinion could be given. Because of the expense this involved, about £1000, the crown agents felt that money could be saved if a qualified engineer already in the colony, for example Andrews, could do the preliminary work under instruction from Coode. Andrews could report back in person because he was due to travel to England on leave anyway.

Meanwhile the Port Elizabeth business community experienced increasing difficulties. "It is seriously feared that this silting up and formation of a Bar will very shortly prevent the landing or shipping of cargo from the present localities". (14) Because it was generally believed that the filling-in of the breakwater was the root cause of the problem, they suggested it might be "remedied, to some extent, by the removal of at least a portion of this filling up of the Breakwater". The harbour board declined to express an opinion and referred the whole matter to the government. (15)

PE Telegraph proposal: 1868

In any event, some did not see opening-up the breakwater as a solution. It was pointed out that an open pile breakwater had left "no more protection to boats inside than outside". (16) Therefore an alternative plan was put forward to save what had been already built. (17) This involved completely enclosing the existing basin by building an arm out at 45° from Jetty Street towards an extended, overlapping shield. To prevent future flood damage, the Baakens was to be diverted south of the breakwater. The beach would be controlled by a seawall which would provide additional wharfage space as well as preserve the boating companies existing interests. The area to the south of the breakwater could eventually be reclaimed. Initial dredging of the shoals would in time give way to light maintenance dredging.
PE TELEGRAPH PROPOSAL (1868)

Proposed Plan

Recovered ground to be planted

Jetty St
Quay
Bakker's River

Port Elizabeth Telegraph 25/9/1868 p 2
Neate Survey: 1868-69

By October 1868 the harbour board still had not heard if the government had found an engineer to carry out an inspection. They therefore again approached them on the matter because the silting had become "seriously obstructive". (18) Meanwhile, parliament sanctioned the expense of getting out an engineer from England. On Coode's recommendation, Charles Neate was appointed to survey and report on all the Cape harbours. He left England towards the end of October 1868. (19) He had studied under an eminent engineer and later worked for him for seven years. Later he was employed on harbour improvements by the Brazilian government for 14 years. His fee was £140 a month while absent from England. (20)

When it was made known that Neate would require as much local information as possible, moves were made to survey the area around the Port Elizabeth works because the available maps were on a scale "far too small for Engineering purposes". Local surveyor, Robert Pinchun, offered to do the job for £40 if he was provided with a boat and crew. But the task was deferred because "it appears undersirable to take any steps in anticipation of his [Neate's] inspection". (21)

Neate arrived in Cape Town at the end of November and the Port Elizabeth harbour commissioners were informed by the governor that they were to "place at Mr. Neate's disposal every information it may be able to afford him upon the subject of his inquiry, and that it will render him every assistance which the importance of his mission demands". (22) Neate arrived in Port Elizabeth on board the DANE on December 6. (23) He found, as had been suspected, the available maps were on too small a scale to be of much use. Thus the harbour master, F Skead (1865-88), was soon seconded to help him survey the harbour area. (24)

Neate completed his assessment of the harbour works and moved on to East London in February 1869. (25) On his departure the harbour board impressed upon him the need for immediate action. (26) Soon the harbour master, Skead, reported that there had been very serious shoaling since he had conducted the survey of the harbour area for
Neate. (27) The beachline had extended 37 metres in eight weeks and was threatening to advance beyond the shield which was now only 41 metres away. Because of the urgency of the matter, he concluded that there was no time to wait months for Neate to report to Coode. In anticipation of Coode suggesting the same thing, he recommended that the board take the matter into its own hands and open up the breakwater so that the sand could be cleared by the resultant current. (28) The boating companies supported Skead's proposal. (29)

Neate's emergency proposal: 1869
Both Skead and the board notified Neate in East London of the proposal. But he received their letters just before he embarked for Port Natal so his reply was delayed. (30) Although Neate appreciated the urgency of the matter, he did not know what Coode would recommend: (31)

In taking the step now urged...the Board will therefore incur the risk of acting in a manner which would not be considered advisable by the person upon whose advice they have sent to seek. This is something more than failing in deference to professional etiquette...

Nevertheless the case is an exceptional one... Under these circumstances should the Government refer to me on the matter...I shall be prepared to recommend that certain steps be taken in anticipation of the report of Mr Coode.

While Neate was still in Natal, the board put the matter to the governor on one of his Port Elizabeth visits. Thus Neate was requested to make his recommendations which he discussed with the board on his way back to Cape Town. (32) He was "most reluctant to express any opinion pending the report of Mr Coode", but felt the best course of action, without prejudicing Coode's plans, was to open the breakwater near the shield for about 27 metres. This would allow a scouring current through. Sufficient piles, however, would have to be left in place to support the decking.
EXTENT OF SILTING AT BREAKWATER (1869)

A Diagram illustrating the prominent particulars connected with the construction of the old breakwater & shield.

Port Elizabeth Public Library
Because this step would initially result in a lot of sand being deposited on the landing beach, a temporary open jetty would have to be built off Jetty Street. To save money, the piles removed from the breakwater could be used. It was to be 91 metres long with a 23-metre head for accommodating lighters. (33) The idea was enthusiastically supported: "Old residents of Port Elizabeth will remember with what quick despatch goods were landed on and embarked from the old pier, during the brief period it was good for those purposes". In addition, the proposed jetty was conveniently near the "spot already set apart for a railway terminus". (34) Neate estimated the jetty's cost to be £1400. The whole scheme would be £4750. The most expensive item was £2100 for removing stone from below the waterline which required the purchase of a diving bell. (35)

The board approved the idea and notified the government it was prepared to carry out the work with its permission. By now the harbour board's former resident engineer, A G Warren, had become the scapegoat for the breakwater becoming "an expensive failure": (36)

the so-called harbour improvements of Algoa Bay, owing to the default through ignorance of successive Resident Engineers, are a comparative failure. Had the advice of Mr. Andrews or the counsel of Mr. Bourne been taken when procured, and acted upon, a different result might, and doubtless would, have been obtained. Our then resident engineer, however, thought himself a better judge upon this point than either of those competent authorities, and the Commissioners concurred.

Meanwhile, Coode was notified of the latest developments. He recommended that even more stone work, about 90 metres, be removed from the breakwater. But he wanted at all times to be kept informed of any work done and what effect it had. (37) Shortly afterwards Neate reported his findings to Coode who endorsed his preliminary recommendations. (38) Back in Port Elizabeth Skead reported that shoaling had advanced rapidly since his March soundings. The outer line of the bank between the end of the shield and the PE Boating Company jetty
had advanced 18 metres towards the shore while its inner edge had extended up to 61 metres inshore. The inner bank was just covered by water at low spring tide. The beach on both sides of the dwarf jetty had been scoured out, leaving bare rock. The beach within the shield had advanced 18 metres and there was bare sand along the shield's sea face at low tide. To the south, the beach had advanced to within 9 metres of the end of the breakwater, a 55-metre gain since December 1868.(39)

H W Piers, whose plan had been rejected in 1855, took the opportunity to remind the harbour board:[40]

that before a single pile or stone had been placed in position to form the pier, I explained distinctly in writing, and verbally to the Board, that no other result could possibly be looked for. Captain Salmond was the only one who acquiesced in my views, but was overruled by the rest.

At the time Piers had proposed a set of double piers which would have overcome the shoaling problem. Now, he felt that opening the breakwater would "have no other effect than to form a channel through the Northern accumulation of sand".(41)

Because Coode had not yet come up with a plan and with the approach of the southeaster season, the harbour board urged the government to allow work to begin on Neate's scheme as soon as possible. The task was thus placed under Andrews's general supervision with John Woolacott as superintendent.(42) Andrews arrived in early September to supervise the initial work which soon got underway.(43) He reported that the cost would be far more than Neate's estimate because of subsequent shoaling. His intention was to remove 61 metres of stone as he felt Coode's suggestion was too much and Neate's not enough.(44)
The Great Gale: 1869

Before much could be achieved at the breakwater, the great gale of 1869 struck:

Sunday last, the 19th September, 1869, will ever be a day of melancholy interest in the history of Port Elizabeth as that upon which it was visited with a south-east gale of fearful and unparalleled violence, occasioning an amount of destruction to the shipping quite unprecedented since it has been known as a harbour. (45)

Old residents affirm that it has never been approached in intensity since 1834, although in September, 1859, there was a heavy gale, during which seven vessels were wrecked. (46)

Winds of up to 121 kilometres an hour lashed the bay. In all 12 vessels were wrecked and 11 lives lost. (47) Damage was estimated at about £120,000. (48) Subsequently allegations, that the wrecked ships had inferior anchor cables, were proved unfounded. (49)

Ironically, the gale achieved in a matter of hours, what the harbour board hoped to achieve in months of tedious work: (50)

The works, which were but lately enclosed within a bank of sand, now stand out in deep water, through the washing away of the bank by the waves and current during the storm... A few days ago, only, the sand at low water was nearly dry all around the shield - now there is from 15 to 20 feet [51] of water instead... It is unfortunate that the opening now being made in the Breakwater had not been completed, for if it had, there cannot be a doubt that the whole of the inner harbour would have been thoroughly scoured out.
GREAT GALE AFTERMATH (1869)
Despite this turn of events, some of the boating companies transferred their operations to the south side of the breakwater. (52) This move was necessary because the outer shoal caused a heavy break in bad weather and at low tide. The green light at the end of the PE Boating Company's jetty was transferred to the end of the breakwater "where Boats can land with greater safety than on any part of the shore". (53)

Stone removal continues:
Meanwhile, the removal of stone began to have the desired effect. Soundings showed that sand was being scoured out from both inside and outside the breakwater in the vicinity of the growing space. But there was little difference around the shield. By mid-November 30 metres of the seawall parapet had been removed to a depth of 2.4 metres. The divers had cleared out 15 tons of small stone, while 906 tons had been removed by hand from above the waterline. The landing beach, however, was only usable at high tide during calm weather. A start was also made on the jetty abutment. (54) In time, with further harbour development, this jetty became known as "No. 1 jetty" and finally named the "Barkly jetty" after the governor. [55] Stone from the parapet was used in the abutment. It was transported there by tramway. The smaller stone was sold as ballast. On average 57 men were employed on the works. (56)

By early December a start was made on dredging out the smaller stone from the hearting. (57) In February 1870 work commenced driving piles for the new jetty. (58) When the 25-metre abutment was completed, it was 3.3 metres high and 2.2 metres wide. (59) Andrews reported that he was now less inclined to doubt the ultimate success of the project. But work on the new jetty was being held up by a shortage of timber. Construction was restricted to the rate at which piles were drawn from the breakwater. (60)
7.2 COODE SCHEME: 1870
The governor received Coode's report on the eastern Cape harbour works in April 1870 and it was submitted to parliament.(61) He proposed a massive £442745 scheme for Port Elizabeth. Including his East London plan for £180696 and Kowie one for £86623, Coode proposed that £710064 be spent on eastern Cape harbours. Together with what had already been spent, this was seen, by even local observers, as "a startling amount, in view of the existing financial difficulties of the Government and the indebtedness of the colony to foreign and resident creditors".(62) Coode's Port Elizabeth plan, however, was designed to meet future as well as present needs. He in fact suggested that the work should be undertaken in successive sections so that the effect of each could be tested before the execution of the next. The scheme comprised of three parts: an outer harbour, an entrance basin and an inner floating basin. It could be built in four independent stages:

1. £71658 The continued removal of stone from the present breakwater to the 152-metre mark, where a 183-metre outer jetty was to be built, backed by a 488-metre retaining bank south of the existing works.[63]
2. £130282 The extension of the existing shield into a 305-metre outer breakwater and the construction of a 122-metre inner jetty to form the entrance basin.
3. £6818 The construction of a channel to connect the Baakens to the entrance basin. To prevent future flood damage, a weir was to be built across the river near Fort Frederick.
4. £233987 The development of a 5.67 hectare inner floating basin below the Baakens weir to provide 914 metres of wharf space. The 24-metre wide entrance was to be spanned by a road-rail swing bridge. A slipway was to be built capable of taking vessels able to enter the basin. Space was also provided for a 122-metre dry dock if needed at a future date.

Total £442745
Opposition to the Coode Scheme:
The sheer scale of the whole scheme saw it run into strong opposition from the government. The governor, Sir Philip Wodehouse (1862-70), pointed out to parliament that even the first phase of £71,658 was merely to remove the stone already deposited in the breakwater. In Port Elizabeth his attitude was seen as yet another example of "his usual antagonism to everything affecting the prosperity of this province". (64) It was also noted that the cost of the initial phase could be a lot less if convict labour was used instead of paid labourers. This was now feasible because the Table Bay docks were about to be completed and several hundred convicts would become available for other projects. (65)

Not even the most ardent promoters of Port Elizabeth harbour development seriously believed that the whole scheme would be sanctioned: (66)

As for the docks, &c., if Sir Philip will send us the plans we shall hang them up in the Town Hall as samples of very pretty engineering drawing, and not trouble any one further for the next 100 years in carrying out their construction.

But the first phase was seen as being vitally important to the town’s future as a thriving port: (67)

All that is required for the port is to carry out the extension of opening in arm of present breakwater, lengthening the shield, and a couple of jetties run from the shore, which, with the assistance of convict labour, can be done for less than £50,000. We want nothing further. Steamers will come round here - bring our goods and take away our produce at a cheaper rate than any other port in the colony...

The writer, however, felt that the entire scheme was of doubtful utility:
Enough money has been pitched into the sea in this colony. Would it not be more desirable to turn our attention to bridging our rivers, making roads and railways, and looking after irrigation works?

**Slow progress at the Breakwater:**

While all this theorising was being bandied about, conditions at the breakwater bar became so bad that the harbour board was forced to take action: "a RED BALL will be shown from a mast at the outer end of the Shield, and Boats are then warned not to incur the risk". (68)

As if to add insult to injury, the Table Bay docks were officially opened on July 11, 1870, a full 10 years after construction was started. (69)

These developments incensed the Port Elizabeth chamber of commerce to complain to the harbour board about "the serious inconvenience experienced on account of the present state of the Harbour works". (70) It further noted that it could not "help remarking on the tardiness which characterises the construction of the new Jetty". (71) Powerless, the harbour board merely passed the matter on to the government who were responsible for the work being done. Progress at the jetty was restricted to the rate at which piles were being withdrawn from the breakwater. Because of the limited funds available, no new timber could be purchased to speed up the process. Only about £500 remained of the initial £5000 grant. (72) The government delayed making a decision until Andrews, about to visit the works, reported on the matter. (73)

The problems at the harbour were intensified by the fact that the lure of diamonds had proved too much for some. The works foreman, Woolacott, reported to Andrews that "the best of the men whom I had employed on the works have left for the Diamond Fields and that those that are left want an increase of wages". (74) Thus he had already raised some by 6d a day but expected to have to increase it again if men were to be retained. Although local carpenters were getting 10s a day, he was able to pay 7-8s.
Meanwhile Andrews informed the government of the difficulties being experienced extracting piles from the breakwater. One pile alone had taken three weeks to remove prompting him to order a hydraulic lift from England. But even this was not enough. To further speed up work, another lift had been ordered and was on its way out. [75] Andrews, however, would only be in a position to estimate the extra cost of getting timber from Knysna after he had inspected the works. As a result of Andrews's report on the problems being experienced, parliament authorised more money for the project. [76]

The supervising engineer resigns: 1871

In due course Andrews inspected the works and suggested that the jetty be extended by 45.7 metres, giving it a total length from the shore of 146.3 metres. [77] By now the government had advanced another £1000 for the "experimental" work to continue. [78]

Andrews, however, was deeply offended when he was told that no work on the extension was to be done pending Coode's approval: [79]

I regret that it has been thought necessary to refer this simple matter to Mr. Coode knowing that gentleman can only be guided by my reports to him and that experience I have gained on these works is to be put on one side...

So strong is my opinion that...I have [no]...confidence placed in me - I must beg to be allowed to resign all charge of these works as soon as it is possible to place them in other hands.

He went on to point out that waiting for a decision from London meant that the jetty's head could not be built. Thus the body of the jetty was unprotected and in danger of being swept away by the first heavy seas. He also repeated his earlier disapproval of "the present system of management" and its "improper line of conduct".
Andrews was assured that the government had every confidence in him. Even his suggestion that the works be placed under professional supervision was receiving attention. (80) With the Table Bay docks completed, however, he resigned his post and departed for England.

The Public Works Department takes over: 1871
As a result of Andrews's resignation, responsibility for the works passed to the chief inspector of public works, M R Robinson, in March 1871. (81) Ill-feeling, however, did not end with Andrews. The harbour board was also on the verge of resigning in protest against the way they had been treated by the government. They complained that they had been "treated discourteously" in not being officially informed of Robinson's appointment, or, for that matter, Andrews's. Only the importance of the project prevented them resigning. (82)

As it was, Coode approved Andrews's suggestion that the jetty be extended. But he warned that anything beyond 152 metres would "be prejudicial to future works of improvement at this port". (83) Robinson in turn agreed with Andrews "that there was no economy in carrying on such works without professional supervision". (84) Thus he appointed James Bisset as resident engineer. Work on the jetty, however, was held up by confusion having arisen out of counter orders for sneezewood that had been placed by both the government and Andrews. As a result the woodcutters had been reluctant to run any further risks on the order. The problem was only overcome by Bisset personally travelling to the Alexandria forests. (85)

After inspecting the works, Robinson reported that the jetty was too narrow and would probably have to be widened. He also felt that it was pointless continuing the extraction of piles with "high-waged free labour". (86) He recommended the use of convicts instead. Soon permission was granted for convicts to be placed at the harbour board's disposal (87) and little progress was made until a gang of 130 arrived in July 1871. On average 80 worked on the breakwater and the rest on the jetty. (88)
When Robinson had taken charge of the works on March 13, £8103 1s 5d had already been spent: "a sum far exceeding the estimate...though the jetty is incomplete, and little, if any, permanent advantage has arisen from opening the breakwater". [89] On the other hand, the jetty had "already proved of great advantage for landing and embarking passengers, and for other light boat work". But Robinson found that inferior timber had been used in places and estimated it would have to be replaced within about six years. Since 1869, 69 main piles had been driven and 1688 metres of 2.74 by 0.91 metre decking boards laid. [90] At the breakwater the removal of 148 piles had resulted in an opening of 42.1 metres. Divers were responsible for 22% of the 7006 tons of stone that had been raised. Of this 2241 tons was sold as ballast and 2795 tons delivered for use at the new jetty. [91]

Looking to the future, Robinson noted: [92]

As regards the improvements proposed by Mr. Coode for this harbour, however admirable in themselves, I am under the impression that works of the kind proposed are not considered by those more immediately interested in that port as of pressing importance. The completion and widening of the present jetty, the erection of another in iron, and the removal of the dangerous sandbanks about the breakwater, by the action of the scour through the opening, near the shield, will be all that is required for some years...although I have not yet sufficiently considered the cost of the works referred to, I am generally of opinion that a loan of £25,000 will be sufficient for some years.

Safe in the knowledge that the whole issue was out of its hands, the board took the government to task over the immediate future of the project in its 1870 report: [93]

The Board have not been informed in what manner it is intended to proceed with the works as recommended by Mr. Coode, but presuming that the main object at present is
to remove the piles and stones from the closed pier, they cannot but remark on the inefficient nature of the operations, owing to the small number of men employed, and want of adequate machinery.

The course of procedure, although it may have kept down the expenditure for the past two years within the parliamentary vote, has certainly been anything but economical or useful in its results.

The Board trust that a more liberal expenditure will in the ensuing year enable greater progress to be made in advancing works that the Board are assured will eventually prove successful.

Despite the harbour board's brave words and its optimism about the future, the fact remained that the breakwater scheme was a dismal failure. By the end of 1874, 152 metres of breakwater, as required by Coode, had been removed. (94) But it was subsequently decided to continue the work and remove the whole structure. The task was eventually completed during 1884.[95]
Before 1855 the Port Elizabeth harbour board was merely an advisory body. It had no powers and not even the means to hire a secretary. In anticipation of his new harbour dispensation, the governor, Sir George Grey (1854-61), got parliament to grant the harbour board £3000 to cover immediate expenses during 1855. In addition, the board received the rights to the beach between the Fishery and the Swartkops River to tide them over until an act of incorporation was passed. Thus occupants of the beach were given three months notice to move. The board, however, relented and extended the period to June 30, 1856, if rent was paid. They intimated that the period would be extended if at all possible.

Initially there was some confusion as to what use the governor intended the £3000 he had made available. The matter was settled when the harbour board was informed that the money was "in aid of the erection of a Breakwater" and not for harbour improvements generally. Thus "as soon as the Commissioners of the Harbour Board shall submit a plan for such a work, and a Scheme for executing it, which shall receive HE's approval, the sum will be placed at the disposal of the Board". To help in the preparatory work, parliament also made available an additional "£50 for blasting the rocks to level the beach and landing place".

To secure some kind of constant income in the long term, the harbour board applied to government for permission to extend the period of lease it could grant on its newly acquired beach land which currently brought in only £700 a year. Although not against it, the governor pointed out that they would be committed for up to 33 years. This would be unwise as it was "impossible in a Town so likely to increase in wealth and business as Port Elizabeth, to estimate the future value of this land, as to require the future value from parties at present taking leases."

In due course the cost of the hybrid breakwater scheme was estimated to be a moderate £20 000. As parliament had already granted £3000, the secretary to government felt that there should be no obstacle to
an immediate start being made. The balance could either be raised by a loan under a new ordinance or be paid for directly out of public funds although the latter was doubtful. Even Cape Town harbour development had received no direct finance. The governor informed the board he would do his best to help them with the scheme. But if they could not raise the required £17000, he could do nothing until he had put the matter to parliament because it was doubtful whether present government finances could bear the extra burden. (103)

In November 1855 the governor announced he was prepared to approve the plan and place the £3000 at their disposal. In the meantime they were to be issued with a £500 instalment. During the next session of parliament he would raise the matter of public finance and the right to raise money by imposing a duty. But he could not help the harbour board with their labour problem. He warned that a labourer would "scarcely continue to work for a Shilling a day when he is surrounded by large numbers of Fingoes earning double or even fourfold that amount". (104)

Despite these drawbacks, the board set about the preparatory work and by the end of the year £333 15s 1d had been spent. This was amply covered by: £132 10s from rents, the £50 special grant for blasting rocks and the £500 advance on the £3000. Of the 27 lots of beach land under the harbour board's control, seven were unlet and three were occupied by the port office, boat house and well. (105)

Early in 1856 there was strong public reaction when an editorial in the Port Elizabeth Mercury noted that the breakwater was the "throwing of public money into the sea". (106) It was felt the remark would prejudice a further vote of funds. (107) The harbour board secretary, Thomas Wormald, countered by stating the works were in fact 20 years overdue. To withdraw aid would be throwing past expenditure into the sea. (108) But hopes to have the works financed by the government were soon put in jeopardy when it was learned that the current colonial estimates showed a £57000 deficit. (109)
In a bid to raise more funds, the board applied to take over the government's share of the guano rights to Bird Island. Although the scheme soon ran into difficulties, the secretary to government felt they would eventually get the rights.[110]

Wharfage dues proposal: 1856
Towards the end of 1856 the harbour board ran short of funds and applied to the government for a £3000-4000 loan to enable work to continue. They also requested the right to impose a wharfage duty against which they could raise loans. Although the governor had been against this in the past, he now felt it was the only way funds could be raised. As a result he asked the harbour board to arrange a suitable tariff in consultation with the Port Elizabeth chamber of commerce and municipal authorities. Once this was settled an appropriate bill could be put before the next session of parliament. Because of the importance of the works, the governor was prepared to make the requested loan. But the board would have to put up their beach land as security.(111)

The harbour board convened a meeting of all interested parties to discuss the proposed wharfage dues on November 20.(112) A committee was elected to investigate the matter and it reported back at a meeting a week later.[113] Although the harbour board objected to some minor details, the following tariff was eventually agreed to:(114)

3d per 100lb [115] on wool exported
0,25% on the declared value of all other colonial produce
0,20% on the declared value of all imports

It was estimated that the wharfage duty would raise £3000 a year in addition to the £500 from beach land rents.[116] The harbour board had to raise £21000 or about £5000 a year. Thus the duty would have to be levied for 9½ years as a sinking fund. Or debentures of £100 would have to be issued, redeemable over the same period, by annual payments of £14 1s 6d. The interest on the initial loan would amount to £3100 or 15%. The committee calculated their figures on the breakwater taking four years to complete. The harbour board, however,
was adamant it would only take three. (117)

Meanwhile the harbour board's expectations were dashed when the government proposed to advance them only £1000 on the security of their beach lands. (118) The fact was made even more painful when it was learned from the Cape papers that the imperial government was prepared to advance £1 million for the Table Bay breakwater. (119) The board therefore again approached the governor and managed to get the amount increased to £3000. (120) But they still felt hard done by. At the end of February 1857 they reported: (121)

The uncertain financial position of the Board has, doubtless, hitherto greatly retarded the progress of the works, and entailed upon the Commissioners the necessity of so regulating the outlay, as unavoidably to render the management account a comparatively heavy item of expenditure.

During the 1857 session of parliament the Port Elizabeth wharfage bill was introduced. There was strong opposition to it because of the proposed tariff on wool exports. Instead, it was felt the money could be raised by hiring out the landing beach. (122) By July the bill had been rejected. But Molteno's proposal, that the harbour board be advanced £3000 to enable it to continue work until the next session, was accepted. (123)

**Port Elizabeth Wharfage Dues Act: 1858**

The board's financial problem was eased to a large extent when the Port Elizabeth Wharfage Dues Act was passed in June 1858 to enable it to raise £21500. [124] Thus from July 1 the board was entitled to levy a duty designed to bring in £3000 a year. The inflow of funds infused fresh spirit into the whole operation. (125)

While the wharfage bill had been making its second journey through parliament, the Cape Frontier Times took it to task "as an unscrupulous attempt to tax the entire public for the special benefit of the Port Elizabeth community". (126) There was an immediate
reaction from the Herald. It pointed out that Port Elizabeth was "THE Port of the Eastern Province" as "nine-tenths - nay, ninety-nine hundredths" of the regions goods came "through the blue waters of our Bay":(127)

The people of Albany are paraded as models of liberality and integrity, because they foresooth subscribed £25,000 for the opening of the Kowie, but not a word is said about the £25,000 furnished by Government for the same object - oh, no! this would not suit the purpose of the Times - and the conclusion he comes to is that the "people of Port Elizabeth prefer dipping their fingers into the pockets of their neighbours for their Harbour"... We had expected greater liberality from our contemporary than that evinced in the article before us. When will Grahamstown and Port Elizabeth learn to work cordially together?... The progress of one must tend to the prosperity of the other. Politically united, they could almost accomplished (sic) whatever they please; disunited, they are powerless, or worse than powerless, for they tend by their influence and example to retard the effective working of the other constituencies of the Eastern Province.

The Herald did, however, concede that the "principle of taxing our exports is unsound". It felt that the "duty upon goods shipped or landed Coastwise is also very objectionable". Thus it hoped "this portion of the Bill will be amended before it passes into Law."

The hope was fulfilled as goods shipped within the colony were exempt under the act.[128] From July 1, 1858, the following payments had to be made on all other goods landed or shipped in Algoa Bay: wool - 3d per 45kg, all other - 5s per £100.(129) These rates remained in force during the working life of the breakwater.[130] At the same time the harbour board advertised for £10000 on debentures, in sums of at least £100, at 6%, to be repaid within 10 years.(131) The amount was eventually oversubscribed by several thousand pounds.(132)
In June 1859 the Herald published an editorial aimed at the parliamentary committee sitting on "Federation or Separation". It was pointed out that Port Elizabeth's direct trade had grown impressively over the past 15 years. In addition the 50 or so vessels that traded coastwise between the two major ports had their goods cleared in Cape Town. Thus if the necessary adjustment of £25000 in customs duties was made, local customs receipts for 1857 would exceed Cape Town's by £23000.(133)

We only desire of the Committee when, considering the relative importance of the two harbours, to "mark and inwardly digest" the above unmistakable facts, containing what, in official language, is called "an exposé" of the actual trade of each.

The board submitted Warren's plan to the government in April 1860.(134) Simultaneously they called tenders for £8425 on their debentures to purchase timber. The 6% interest would be payable half yearly and the stock would be redeemable at periods from five to 10 years. As usual the minimum amount was £100. The Herald pointed out to "capitalists...unacquainted with this kind of security...these...offer a safe and simple security, and may be transferred from hand to hand, as readily as a promissory note".(135)

But doubts as to the viability of the breakwater were soon raised. The issue was brought to parliament's attention by a Cape Town member in 1861.[136] He had "observed that the works had been in progress for many years, but that they appeared to be of no use, and the only result of continuing them was a waste of public money. The jetty was, he thought, almost, if not quite, useless; the contents of the cargo boats were landed on the beach, and there was only one small jetty used by a boating company." He thus moved that the governor be asked to furnish the following details: the amount of money that had been spent on it to date, out of what funds it had come and if it had been raised, on what security.(137)
Surprisingly, W M Harries, chairman of the harbour board, seconded the motion in the house of assembly. But he first outlined the progress that had been achieved. At least with the breakwater, boats could operate on the landing beach in weather that once would have made it impossible. The board had also: built a port office and a hard road on the beach in front of the warehouses, drained the town near the beach and nearly completed the Donkin lighthouse. By the end of the month the required report was furnished. (138) The harbour board's total expenditure to date was £40934 of which it estimated about £35000 was on the breakwater. Timber for piles was the largest single expense, making up 38% of the total. It was followed by labour (26%), charges on iron, machinery etc (18%), salaries (7%), port office (4%) and stone (3%). Of the expenditure, £2446 had been on assets like the lighthouse, workshops, port office and land purchased. A third of the board's £44416 revenue had come from loans on debentures, 27% from wharfage dues, 14% from parliamentary grants and 9% from beach land rents.

**Port Elizabeth Harbour Wharfage Amendment Act: 1862**

In his annual report for 1861, the resident engineer, Warren, estimated that a further £45850 was needed to complete the breakwater, shield and inner jetties. A large amount of time and money would be saved if this amount could be obtained and expended over two years. Thus the harbour board applied for permission to raise a further £28500 to complete the works. They had only £4225 of the original £21500 left. This time they wanted the debentures to be more negotiable by having coupons affixed, similar to those of the Table Bay harbour board. (139) In due course parliament passed the Port Elizabeth Harbour Wharfage Amendment Act which authorised the board to raise an additional £29500 to complete the works. Thus the total made available to them was brought to £51000. [140]

In April 1863, however, the board applied to parliament for another £25000-£30000 because Andrews's alterations involved additional expenditure. They pointed out that the board's annual income was enough, not only to cover the interest on the additional loan, but also to pay back the capital. Their debentures under the 1862
wharfage amendment act had sold for an average of £10 13s 3d, which was considered satisfactory. As a result of the increased income during 1862, they had been able to "prosecute the work with a vigour hitherto precluded by their very limited resources." Meanwhile the board's financial subcommittee had reported that the first £21500 would be repaid by June 1869. The new series of debentures were only due by the end of 1892. After interest had been taken into account, £28112 was available for harbour works, thus there was a need for a further loan to complete the project.[142]

The government, however, did not react to the harbour board's appeal. Thus early in 1864 the board informed the government that £29000 was still needed to complete the works and connect them by a tramway with the beach stores. During 1863 the board had started a sinking fund out which it was intended to pay off all the debentures as they became due. The fund had £3900 in it so far.[143]

Algoa Bay Harbour Amendment Act: 1864
The board's worries about the future progress of the works, however, were relieved in July 1864 when parliament passed the Algoa Bay Harbour Amendment Act which enabled it to raise the additional £29000. The conditions were the same as those under the original 1858 act.[144] Although the debentures were sent to the crown agents, by January 1865 the board had still not been advised if they had been received. The delay placed "the commissioners under personal obligations pending their sale".[145] Meanwhile, the first debentures had fallen due and £500 was paid off. The sinking fund had risen to £6000.

In mid-1866, pending Pfeil's plan to save the breakwater, the harbour board reported the completion of the works but requested another £25000-30000 "in consequence of the urgent necessity that exists for further works, in order to obtain the full benefit of what has already been done".[146] Even after Pfeil's £40000 scheme was submitted, the governor delayed things by wanting to know how the board intended to finance the interest on any further loans raised under parliamentary sanction.[147] The harbour board were forced to
admit that, as it was, they were going to run up a deficit of £3480 by 1870 paying off the first £21500 loan. Thereafter there would be a surplus of £1160. But this would only finance a £15000 loan which would merely pay for the dredger. If £40000 were raised under parliamentary guarantee, however, the entire project could be completed in two years. The resultant appreciable drop in handling costs would encourage more trade which would boost the board's income - "in fact, quite enough to meet the increased liability for interest and redemption on the £40,000 asked for". (148)

Port Elizabeth Harbour Loan Act: 1867

Despite the harbour board's problems, the Port Elizabeth Harbour Loan Act was passed during August 1867.[149] The government immediately called for tenders for the harbour board's new debentures.(150) But there was a public outcry when it was found that "as quietly and as deftly as anything we have seen", the act had increased wharfage dues by 50%.(151) It was not so much the increase, as the way it was accomplished, that hurt. As far as was known, no notification of an amendment to the schedule of rates had been given. The rate on wool was increased from 3d to 4½d, while that on everything else went from 5s per £100 to 7s 6d.(152) On top of this, in September the board introduced charges for the use of its equipment. The rate was 1s per ton for cranes and 5s an hour for its trucks.(153) Shortly afterwards a 2s 6d an hour fine was introduced for any items left on the breakwater for longer than six hours.(154)

The massive silting of the breakwater in November 1867, however, made the board's new issue of debentures a lost cause. By the end of the year they reported that their funds "being almost exhausted, they will not be in a position to meet the Interest on Debentures payable on the 15th April next, at the Crown Agents for the Colonies".(155) As it was the government had decided to suspend expenditure on the works until advice was obtained from engineers in England.(156) To overcome the interest payment problem the government advanced the board £1800 and made arrangements for a similar amount for the October payment. But the £3600 was to be paid back in £300 monthly instalments out of wharfage revenue.(157)
The harbour board therefore decided to confine its activities to maintenance. To enable it to meet its interest commitments, none of its wharfage income was diverted to the sinking fund to pay off the first loan of £21500. (158) By January 1, £16500 of the first loan was still outstanding but only £1000 fell due during 1868. The sinking fund stood at £10790. (159) To date £156539 had been spent on the works since 1855. Labour made up 33%, piles 26% and interest 13%. (160)

The government began to keep a strict check on the board's finances. (161a) In March 1868 it wanted to know what was being done to warrant "£1200 necessary for labor". (161b) The board then had to justify its maintenance staff which consisted of nine labourers, two carpenters, a blacksmith, a mule driver and a "breaksman" who doubled as a carpenter when not driving. Wages ranged from 8s a day for artisans to 4s 6d for the labourers. (162)

In due course Neate inspected the works and early in 1869 recommended that a temporary jetty be built and the breakwater be opened to scour out the sand. Parliament voted £5000 for the work which was placed under the supervision of the Table Bay harbour engineer, Andrews. Separate accounts were to be kept and the amount was to be repaid by the harbour board when it was in funds again. (163) In April 1870 Andrews revealed that £3027 of the £5000 had been spent and an estimated further £3000, on top of the sum in hand, was still required to complete the project. (164) The matter was therefore put to parliament where it was even suggested that the £5000 be raised under Act 14 of 1867 because its provisions had not been utilised as yet. (165)

Meanwhile the harbour board had been left with very little to do apart from maintenance and meeting its debt commitments. During 1870 its operating costs were down to £1310, a mere 7% of the 1864-65 peak. It did, however, pay off £10706 on outstanding debentures as well as meeting interest payments of £4249. (166)
Harbour Board revenue and expenditure: 1856-70

Between 1856 and 1870, the board spent £188,958 on harbour improvement. The major expenses were labour, piles, interest and debenture repayments:

<table>
<thead>
<tr>
<th>Item</th>
<th>Amount</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labour</td>
<td>£63,683</td>
<td>34</td>
</tr>
<tr>
<td>Piles</td>
<td>£41,067</td>
<td>22</td>
</tr>
<tr>
<td>Interest</td>
<td>£30,790</td>
<td>16</td>
</tr>
<tr>
<td>Debentures</td>
<td>£21,281</td>
<td>11</td>
</tr>
<tr>
<td>Machinery</td>
<td>£17,951</td>
<td>9</td>
</tr>
<tr>
<td>Other</td>
<td>£14,186</td>
<td>8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>£188,958</td>
<td>100</td>
</tr>
</tbody>
</table>

The board's revenue during the same period actually exceeded expenditure by £6,487. It came mainly from debentures and wharfage:

<table>
<thead>
<tr>
<th>Item</th>
<th>Amount</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Debentures</td>
<td>£80,000</td>
<td>41</td>
</tr>
<tr>
<td>Wharfage</td>
<td>£79,900</td>
<td>41</td>
</tr>
<tr>
<td>Other</td>
<td>£35,545</td>
<td>18</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>£195,445</td>
<td>100</td>
</tr>
</tbody>
</table>

Cost of removing the Breakwater: 1869-84

During the 1870s the decision was ultimately taken to remove the breakwater completely. It has been claimed that the removal cost £90,000, but, it is conceded: "no record can be found to substantiate this". The real figure, however, is probably about half that. Unfortunately no continuous separate account for breakwater removal was kept before 1876. Thereafter, until 1884, the task cost £31,441 which was only 12% of all expenditure on harbour works at Port Elizabeth. Up to 1871 a total of £8,103 was spent on removal and constructing the Barkly jetty. Under the public works department (Mar 1871-Sep 1875), £46,299 was spent on all harbour works at Port Elizabeth. Where breakdowns exist, removal was only a small percentage of total expenditure. From March to December 1871 it made up 22% of the
£4957 spent. (172) While from January to June 1874 it was a mere 6% of the £9226 involved. (173) Applying these known proportions to total expenditure in the periods concerned, it could not have cost more than £40000 to remove the breakwater during the 15 years involved. [174]

The relative size of Harbour Board loans: 1858-70
The loans raised by the the Algoa Bay harbour board under government guarantee were a small proportion of the total raised by public corporate bodies for public works up to 1870. The Table Bay harbour board was responsible for the lion's share: (175)

<table>
<thead>
<tr>
<th>Amount</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table Bay</td>
<td>£299950</td>
</tr>
<tr>
<td>Algoa Bay</td>
<td>£79000</td>
</tr>
<tr>
<td>Port Alfred</td>
<td>£76500</td>
</tr>
<tr>
<td>Mossel Bay</td>
<td>£8000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>£463450</strong></td>
</tr>
</tbody>
</table>

Although the Cape had been debt free up to 1858, by 1870 its public debt totalled £1570857. Corporate body government guaranteed loans averaged about a quarter of the Cape's public debt during most of the 1860s. (176) The advent of railway construction on a large scale during the 1870s, however, soon saw harbour loans pale into insignificance. By 1880 railway loans made up 65% of the colony's £11,39 million public debt. Public corporation debt contributed a mere 7% although it was up to £808050. (177)

The actual financing of Port Elizabeth harbour development was never a problem. Revenue from wharfage dues always covered construction costs and debt repayments. The problem was that it eventually became obvious that the breakwater was too small to cope with the increasing size of the growing number of steamships calling at Algoa Bay. The somewhat radical solution was provided when the breakwater was silted up. But the painful experience, coupled with railway development, saw an enclosed harbour at Port Elizabeth delayed until the 1920s.

FOOTNOTES: at the end of the next chapter
8. CONCLUSION
8. CONCLUSION

The year 1870 marks a very important watershed in Port Elizabeth's economic history. The mining revolution was unleashed on the South African economy and as a result the era of wool dominated exports was about to come to an end. In addition, the formation of the Port Elizabeth and Uitenhage Railway Company heralded the advent of a new form of transport to the eastern Cape. Together these two developments spelled the ultimate decline of Port Elizabeth's naturally dominant position in Cape trade. Soon both Cape Town and East London would compete for diamond field trade on an equal footing. The discovery of gold subsequently moved the centre of the South African economy out of the Cape to the Witwatersrand which gave the trading advantage to Durban and Lorenzo Marques.

In Port Elizabeth itself, 50 years of attempted harbour improvements had came to naught. The abandoned breakwater had ruined the landing beach and shippers were in a worse position than they had been in 1820. The harbour board had been de facto deprived of all real control of harbour development and had to be satisfied with maintenance and meeting its debt commitments. It eventually only regained control of the harbour works in 1875.(178) The failure of the breakwater scheme, combined with massive railway development, undoubtedly delayed the construction of an enclosed harbour at Port Elizabeth by half a century. The promoters of both the first jetty (1837-43) and the breakwater (1855-67) rushed their projects into existence without adequate finance and consideration. The destruction of the jetty made it very unlikely that another would be built in a hurry. But dependence on Mfengu beach labour soon revived local interest in harbour development. The breakwater scheme, however, did not provide a less labour intensive method of shipping goods. It grew from the planned 183-metre breakwater in 1855 to the mammoth 317-metre breakwater and 152-metre shield planned by Warren in 1859. In the end it was too small to cope with more than a couple of ships and too big to provide wharf space for boats. Thus all landing and shipping still took place on the landing beach.
In the end the idea of an enclosed harbour was rejected by the government and the temporary jetty proposed by Neate was expanded into "a system of jetties". (179) The wooden Barkly jetty (1869-72) was replaced by the iron North jetty (1878-83) which was later joined by the South (1882-84) and Dom Pedro (1899-1902) jetties. In addition an aerial way and staging for handling explosives were built at North End (1898-99) and a patent slipway was constructed at Happy Valley (1897-1903). The jetties were all extended and widened from time to time. (180) The commissioner of public works, J X Merriman, gave the following reasons for Coode’s massive £919160 1877 scheme not being undertaken: (181)

1. Railway construction came before harbour development - the burden of the railway debt made it currently impossible to raise a loan for harbour development.
2. There was too much difference of opinion on the nature of the works themselves, the scheme provided no wharfage space, merely shelter, thus landing and shipping costs would hardly be affected.

Over the years a host of enclosed harbour schemes were submitted but none were implemented. (182) As it was the whole issue had to wait until 1913 when a commission of engineers recommended that a southern breakwater along the lines of the one proposed by Coode, Son and Matthews in 1897 be built. In 1914 parliament sanctioned a £1.5 million project based on the 1913 recommendations, modified by Colonel G T Nicholson. But the outbreak of World War I (1914-18) delayed its implementation. (183) Eventually, the first concrete block of the present breakwater was laid on November 2, 1922, 85 years after John Thornhill began work on the first jetty in 1837. (184)

Despite the lack of port facilities, Port Elizabeth managed to cope with the massive expansion of wool exports. There is no evidence of these shipments being held up through the lack of facilities. It is doubtful that an enclosed harbour would have attracted extra trade to Port Elizabeth. Thus, by forcing the pace, entrepreneurs probably delayed harbour development at Port Elizabeth by almost a century.
1. EPH 22/11/1867 p 2. Compare 161.5mm in 11 hours to the 406.4mm that fell in six hours during the disastrous 1968 floods - EPH 2/9/1868 p 1.
2. EPH 22/11/1867 p 3
3. PET 22/11/1867 p 3
4. 30 yards = 27.4m
5. EPH 22/11/1867 pp 2-3
7. G2/1868 p 6
8. ibid p 2. See also letter from "Mariner" - EPH 10/4/1868 p 2.
9. G2/1868 p 2
10. ibid p 6
11. CO 887 No 291: 22/11/1867 note, CO 5333 No 1362 19/12/1867 - govt sec to PEHB sec
12. CO 889 5/2/1868 - crown agent to govt sec: enclosure 1/2/1868 - Coode to crown agent; A5/1868 -; HA 75 annexure 12 - governor's message: enclosures - crown agent to govt sec (5/2/1868, 8/2/1868, 24/3/1868, 9/4/1868), Coode to crown agent (1/2/1868, 23/3/1868, 8/4/1868), govt sec to crown agent (10/1/1868); EPH 19/6/1868 p 4, PET 19/6/1868 p 3 - copies of papers that accompanied the governor's message 27/5/1868
14. CO 887 29/7/1868 - PEHB sec to govt sec: enclosure 24/7/1868 - PE chamber of commerce chairman and boating company directors to PEHB
15. CO 887 29/7/1868 - PEHB sec to govt sec
16. PET 25/9/1868 p 2
17. ibid p 2 - see plan of PE Telegraph proposal.
18. CO 887 20/10/1868 - PEHB sec to govt sec
19. CO 889 9/10/1868 - crown agent to govt sec and enclosures, CO 889 17/10/1868 - crown agent to Neate, CO 889 23/10/1868 - crown agent to govt sec
20. CO 889 9/10/1868: enclosure 23/9/1868 - Coode to crown agents
21. CO 892 3/11/1868 - PEHM to govt sec, CO 5055 No 3723 29/10/1868 - govt sec to PEHM, CO 5055 No 3891 16/11/1868 - govt sec to PEHM, CO 5334 No 1295 16/11/1868 - govt sec to PEHB sec
22. CO 5334 No 1357 30/11/1868 - govt sec to PEHB sec
23. EPH 8/12/1868 p 2
24. CO 887 7/12/1868 - PEHB sec to govt sec: enclosure - Neate to PEHB chairman, CO 5334 No 1410 12/12/1868 - govt sec to PEHB sec, CO 892 21/12/1868 - PEHM to govt sec. Neate recommended that Skead be paid £1 a day for the 15 days he spent taking soundings - CO 5334 No 531 22/5/1869 - govt sec to PEHB sec.
25. PET 26/2/1869 p 2
26. CO 903 12/3/1869 - PEHB sec to govt sec
27. EPH 5/3/1869 p 2
28. CO 903 12/3/1869 - PEHB sec to govt sec: enclosure 8/3/1869 PEHM to PEHB chairman
29. CO 903 25/3/1869 - PEHB sec to govt sec: enclosure 19/3/1869 - boating company chairmen to PEHB
30. CO 903 26/3/1869 - PEHB sec to govt sec
31. CO 903 26/3/1869; enclosure 20/3/1869 - Neate to PEHB
33. HA 79 annexure 40: enclosure 3/5/1869 - Neate to govt sec, A2/1869 p 2
34. PET 27/4/1869 p 2
35. HA 79 annexure 40: enclosure 3/5/1869 - Neate to govt sec, A2/1869 p 2
36. PET 16/3/1869 p 2
37. CO 903 10/5/1869 - Coode to govt sec, A2/1869 pp 2-3
38. CO 903 24/6/1869 - Coode to govt sec
39. A2/1869 pp 3-4
41. Ibid
42. CO 903 24/6/1869: enclosures 4/8/1869, 7/8/1869; CO 903 19/7/1869 - PEHB sec to govt sec; CO 903 27/9/1869 - PEHB sec to govt sec; CO 5334 No 635 22/6/1869 - govt sec to PEHB chairman; CO 5335 No 1013 20/9/1869 - govt sec to PEHB sec; CO 5335 No 776 29/7/1869 - govt sec to PEHB sec; PET 6/8/1869 p 2, 17/8/1869 p 2; EPH 10/9/1869 p 2
43. PET 7/9/1869 p 2, EPH 14/9/1869 p 2, PWD 1/1869 22/9/1869 - Woolacott to Andrews
44. HA 81 annexure 186 24/9/1869: enclosure; EPH 1/10/1869 p 3; PET 1/10/1869 p 3 - Andrews report 20/9/1869
45. PET 21/9/1869 p 3
46. EPH 1/10/1869 p 3
47. Ibid, PET 1/10/1869 p 2, EPH 28/1/1870 p 3
48. PET 21/9/1869 p 3
49. EPH 28/1/1870 p 3
50. EPH 28/9/1869 p 2
51. 15 to 20 feet = 4.6 to 6.1 metres
52. PET 26/10/1869 p 2, 29/10/1869 p 2
53. PET 12/11/1869 p 1 - PEHM notice
54. PWD 1/1869 19/11/1869 - PEHM to Andrews
55. PEHB Coode report (1877) pp 2-3, G4/1876 p 7 - 1875 PEHB report. Sir Henry Barkly was governor from 1870-77. The jetty was initially called No 1 Jetty to distinguish it from the abortive No 2 Jetty which was begun in 1873 but soon abandoned because it interfered with surfboats operating from the landing beach. It was referred to as the Barkly Jetty once the PEHB reassumed control of the works from the public works department in 1875.
56. PWD 1/1869 26/11/1869 - PEHM to Andrews
57. PWD 1/1869 10/12/1869, 17/12/1869 - Woolacott to Andrews
58. PWD 1/1869 4/2/1870 - Woolacott to Andrews
59. PWD 1/1869 11/3/1870 - PEHM to Andrews
60. CO 920 No 23 19/4/1870 - Andrews to govt sec
61. CO 916 9/3/1870 - crown agent to govt sec: enclosure 19/2/1870 - Coode report; G24/1870; EPH 26/4/1870 p 2; PET 26/4/1870 p 4
62. PET 26/4/1870 p 2 - editorial comment
63. See illustration of 1872 plan for the implementation of phase 1 of Coode's scheme. No trace of the original 1870 Coode plan could be found.
64. PET 29/4/1870 p 3 - letter from "Bayonian"
65. PET 22/3/1870 p 2
66. PET 29/4/1870 p 3
67. EPH 3/5/1870 p 3 - letter from "X.Y.Z."
68. EPH 25/6/1870 p 1 - PEHB advertisement
69. PET 12/7/1870 p 2
70. CO 920 No 41 12/8/1870 - PEHB sec to govt sec: enclosure
   30/7/1870 PE chamber of commerce sec to PEHB
71. ibid
72. CO 920 No 41 12/8/1870 - PEHB sec to govt sec
73. ibid - note 27/8/1870
74. PWD 1/186 19/9/1870
75. CO 920 No 45 22/8/1870 - Andrews to govt sec, PWD 1/186
   22/8/1870 - Andrews to govt sec, G31/1871 p 30: copy - Skead to
   chief inspector of public works. Andrews refers to a hydraulic
   press while Skead mentions a hydraulic lift.
76. CO 920 No 45 22/8/1870 - Andrews to govt sec: note 26/8/1870
   signed "HdeS"
77. G28/1872 p 114: copy - Coode to govt sec 24/12/1870
78. CO 5336 No 1597 20/12/1870 - govt sec to PEHB sec, CO 5336 No 53
   13/1/1871 - govt sec to PEHB sec
79. CO 5336 No 1598 20/12/1870 - govt sec to Andrews, CO 920 No 70
   21/12/1870 - Andrews to govt sec
80. CO 920 No 70 21/12/1870 - Andrews to govt sec: note; CO 5336 No
   1629 21/12/1870 - govt sec to Andrews
82. CO 933 No 84 11/4/1871 - chief inspector of public works to govt
   sec: paragraph 10. The harbour board's statement contemplating
   resignation was left out of the version presented to parliament
   - G31/1871 pp 30-31.
83. G28/1872 p 114 - Coode to govt sec 24/12/1870
84. G31/1871 p 7
85. ibid pp 7 & 31
86. ibid p 7
87. CO 933 No 84 11/4/1871: note 19/4/1871
88. G28/1872 p 106
89. G31/1871 p 31, CO 933 No 84 11/4/1871. There is no breakdown of
   expenses into jetty construction and breakwater removal 1869-75
   - see section on Breakwater finance in Abandonment for details.
90. G28/1872 p 103
91. ibid p 105, G52/1875 p 17
92. G31/1871 p 8
93. G11/1871 p 1 - 1870 PEHB report
94. G52/1875 p 17
95. G60/1884 p 17 - 1883 PEHB report. On February 21, 1884, the PEHB
   reported: "This work has been practically completed, only a few
   piles at the root end remaining to be removed". Thereafter it is
   never referred to again in PEHB reports.
96. EPH 22/5/1855 p 3
97. EPH 29/5/1855 p 1
98. EPH 12/6/1855 p 3
99. CO 5316 No 557 30/6/1855 - govt sec to PEHB sec
100. CO 5316 No 617 12/7/1855 - govt sec to PEHB chairman
101. CO 5316 No 607 11/7/1855 - govt sec to PEHB sec, EPH 10/7/1855
   p 3
103. CO 664 No 150: enclosure 19/9/1855 - "Mem. for H.E." from govt sec, CO 5316 No 1016 25/10/1855 - govt sec to PEHB chairman
104. CO 5317 No 1104 20/11/1855 - govt sec to PEHB sec. See section on Mfengu & beach labour in Landing & Shipping for more detail on labour problems.
105. G9/1856 pp 2-7 - 1855 PEHB report
106. EPH 18/3/1856 p 2
107. EPH 8/4/1856 p 2
108. ibid p 3
109. ibid p 2
110. The PEHB eventually received guano dues totalling £3856 in 1857, 1858 and 1860 - see Table 14.
111. CO 5318 No 1160 13/11/1856 - govt sec to PEHB sec
112. EPH 18/11/1856 p 1
114. CO 4400 No 82 28/11/1856 - PEHB sec to govt sec
115. 1001b = 45.36kg
116. For example: in 1856 £3195 would have been raised had the duty applied - imports £1493, wool £1487, other colonial produce £215.
117. CO 4400 No 82 28/11/1856 - PEHB sec to govt sec
118. ibid - notes on PEHB sec to govt sec, CO 5318 No 1323 30/12/1856 - govt sec to PEHB sec
119. EPH 23/12/1856 p 4
120. CO 5318 No 52 15/1/1857 - govt sec to PEHB sec
121. G14/1857 p 1 - 1856 PEHB report
122. EPH 5/5/1857 p 2
123. EPH 7/7/1857 p 3
124. Act 10 1858 - For Enabling the Harbour Board of Port Elizabeth to levy certain Wharfage Dues
125. EPH 17/9/1858 p 2
126. Cape Frontier Times 6/4/1858 - quoted by EPH 16/4/1858 p 2
127. EPH 16/4/1858 p 2
128. Also exempted under Act 10 of 1858 were: public, military or naval goods and stores, ships' stores outwards and all re-exports.
129. Act No 10 1858 - schedule No 1
130. In reality the required annual income of £3000 was substantially exceeded every year, reaching a peak of £8477 in 1864 - see Table 14. The charges were increased in 1867 to enable the harbour board to raise a further loan of £40000. The rate on wool was increased to 4d and on other goods to 7s - Act No 14 1867. These remained in force until 1875. To finance a £100000 loan for the first phase of the Coode scheme, the rate was changed to 4d for wool and 7s 6d for other goods. But the coastal trade lost its exemption to foreign trade - Act No 25 of 1875. All told, between 1858 and the end of 1870, £79900 was raised from wharfage dues. This accounted for 41% of the harbour board's revenue and fell just £100 short of balancing its debentures over the same period - see Table 14.
131. EPH 12/11/1858 p 1
132. EPH 5/4/1859 p 4
133. EPH 7/6/1859 p 2
134. CO 766 No 71 27/4/1860 - PEHB sec to govt sec: enclosure
135. EPH 24/4/1860 p 1, 27/4/1860 p 3; PET 26/4/1860 p 1
136. The MP's name was Louw.
137. EPH 17/5/1861 p 3
138. A42/1861, EPH 11/6/1861 p 3
139. CO 801 No 57 7/3/1862 - PEHB sec to govt sec, G16/1862 p 1 - 1861 PEHB report
141. G43/1863 pp 3-4. The financial sub-committee was: W M Harries (chairman), F D Deare and Joseph Simpson.
142. A42/1861, EPH 11/6/1861 P 3; PET 26/4/1860 P 1
143. The name was Louw.
145. Act 24 1864 (26/7/1864)
146. G50/1865 P 1 - 1864 PEHB report
147. Act 24 1864 (26/7/1864)
148. ibid p 5
149. Act No 14 1867 (16/8/1867) - An Act to Enable the Harbour Board at Port Elizabeth to raise a further Loan of Forty Thousand Pounds, and to provide for keeping down the Interest thereof
150. EPH 13/8/1867 p 2
151. EPH 6/8/1867 p 2, 16/8/1867 p 2
152. Act No 14 1867 - schedule
153. PET 10/9/1867 p 1, EPH 17/9/1867 p 1
154. PET 22/10/1867 p 1
155. CO 878 No 327 18/12/1867 - PEHB sec to govt sec
156. CO 887 No 328: 30/12/1867 note of executive council minute, CO 5333 No 14 6/1/1868 - govt sec to PEHB sec
157. CO 5333 No 234 24/2/1868 - PEHB sec to PEHB sec, CPE No 24 26/2/1868: enclosure 24/2/1868 - govt sec to collector of customs
158. CO 887 15/1/1868 - PEHB sec to govt sec
159. CO 887 12/2/1868 - PEHB sec to govt sec
161. a. CO 5333 No 158 7/2/1868 - actg govt sec to PEHB sec, A13/1868
b. CO 5333 No 337 23/3/1868 - actg govt sec to PEHB sec, A13/1868 p 4
162. CO 887 1/4/1868 - PEHB sec to govt sec
163. CO 903 24/6/1869: enclosures 4/8/1869, 7/8/1869; CO 903 19/7/1869 - PEHB sec to govt sec; CO 903 27/9/1869 - PEHB sec to govt sec; CO 5334 No 635 22/6/1869 - govt sec to PEHB chairman; CO 5335 No 776 29/7/1869 - govt sec to PEHB sec; CO 5335 No 1013 20/9/1869 - govt sec to PEHB sec
164. CO 920 No 23 19/4/1870 - Andrews to govt sec
165. CO 920 enclosure: No 58 - "Extract from address of the House of Assembly dated 28 April, 1870, concurred in by the Leg Council"
166. See Table 14.
167. From Table 14.
168. From Table 14.
169. Cooper (1928) p 226
170. The auditor general found that accounts for 1871 and 1872 were apparently not prepared and/or published while the continuous account up to 1875 combined with those of 1876 and 1877 did not balance – G61/1884 p 3.

171. G40/1885 pp 31-32 – 1884 PEHB report
172. G28/1872 p 113, BB (1871) – public works
173. G52/1875 p 22

174. See Table 16 for estimates.

175. BB (1870) p K2 – statement of loans raised for public works under management of corporate bodies

176. From Table 17.

177. BB (1880) pp K2-K4

178. G46/1876 – 1875 PEHB report

179. G48/1881 p 17 – 1880 PEHB report

180. PEHB reports for relevant years

181. G31/1883 p 8

182. Coode report Feb 1883 (£1,17m), Coode, Son & Matthews report 17/2/1897 (£2,5m-£3m), Brebner report 27/6/1899 (£1m-1,92m), Methven report 30/5/1903 (£1,66m), Commission of Engineers report 28/2/1905 (£3,11m-£3,22m), Methven report 1911 (£2m), Nicholson 1913 (£1,5m).

183. UG25/1923 p 4; Port Elizabeth Proposed Harbour Improvements: Report by Mr. M.F.G. Wilson... and Colonel G.T. Nicholson... p 1, SARS 1/10/1924

184. Harris (1985) p 9
9. APPENDICES
9.1 THE CORY MYTH:

The origins of the first Port Elizabeth jetty are shrouded in a veil of confusion largely stemming from events related in Sir George Cory's *Rise of South Africa*. Subsequent historians have perpetuated Cory's myth of a Grahamstown initiated scheme eventually resulting in a jetty being built on a wreck that had survived the pounding surf for two years.

Cory's suggestion that the first move to have a jetty built came from Grahamstown businessmen is an incomplete interpretation of reports in the *Graham's Town Journal* which is his primary source of information. He records that:

A jetty or wharf was not commenced until 1837, when the merchants took up the matter as a private enterprise. A wreck which had lain in the water for over two years and over which the surf had beaten without causing further damage formed, as it were, the start. Alongside this, fourteen trial piles were driven and upon them a temporary structure was erected which greatly facilitated the landing of goods and indicated the great advantages which would accrue from a properly constructed jetty. A company was therefore formed for the purpose of raising £8000 by 600 shares of £10 each. Grahamstown, however, seems to have moved in this matter before Port Elizabeth, for on March 12th, 1832, five years previously, a public meeting was held in the Freemason's Tavern (now Wood's Hotel), when resolutions to the following effect were passed:

1. That in consequence of the great inconvenience and considerable losses which are sustained by the present mode of landing goods at Port Elizabeth (viz. by surf-boats) as well as the delay to ships visiting the Port and much damage to passengers getting on to the shore, that a jetty be constructed.
2. That as a sum of £4,000 will be required for this purpose, a subscription list of shares of £25 each be opened.
3. That a premium of £50 be offered for the best model of a suitable jetty.

The Grahamstown initiation of the first jetty scheme implies that Grahamstown was the undisputed commercial centre of the eastern Cape. Port Elizabeth, on the other hand, was merely Grahamstown's port and incapable of arranging her own harbour improvements. Cory based his observations on the first scheme on a report in the *Graham's Town Journal*. (3) Although he quotes extensively from the report, he neglects to mention that the committee elected at the meeting was to work "in conjunction with the Committee at Port Elizabeth". He also ignores another report on the next page of the newspaper: "Mr.
Wallace the Harbour Master at Port Elizabeth, in a very public spirited manner presented the Meeting with a model of a plan for the Jetty". (4)

The first move came from Port Elizabeth residents over a month before the Grahamstown initiative. [5] On February 6, 1832, the commandant of Port Frederick, Captain Francis Evatt, convened a meeting in Uitenhage to discuss the construction of a jetty. (6) The idea was already sufficiently advanced to have two models of the proposed jetty on display at the meeting.

Cory's error was pointed out as early as 1933. [7] His version of these early developments, however, has found its way into such a recent work as Basil le Cordeur's The Politics of Eastern Cape Separatism via Guy Butler's 1820 Settlers. (8) While Le Cordeur merely mentions the Grahamstown motivation behind Port Elizabeth's first scheme in passing, it does indirectly support his earlier proposition that eastern Cape commerce was dominated by Cape Town and Grahamstown merchants. (9) Thus the notion of an independent body of Port Elizabeth entrepreneurs is indirectly dispelled.

J J Redgrave in his Port Elizabeth in Bygone Days admits that there are several versions as to how the first jetty came into being "but that of Sir George Cory seems the most reliable". (10) He, however, immediately contradicts Cory by mentioning that a jetty meeting was held "as early as March, 1832" under the chairmanship of the Port Elizabeth collector of customs, D P Francis. The meeting he refers to was held on March 3, (11) nine days before Cory's Grahamstown initiative but almost a month after the first meeting organised by Captain Evatt. (12) Redgrave then goes on to quote verbatim from Cory's subsequent expansion of the two-year-old wreck myth: (13)

The Port Elizabeth jetty took its rise from the remains of the wreck of a ship called the Feegee (sic). This vessel had been wrecked at some little, it might almost be said convenient, distance from the shore and had withstood the fury of the sea and wind for so long that it appeared to a Mr. John Thornhill and his friends to be a firm foundation from which a jetty might be commenced. In October of 1837, therefore, they bought it. Into the sand along each side of it seven piles were driven and on all this some sort of wooden framework was constructed, thus the jetty was commenced from the sea end. In March, 1838, Mr. Thornhill went to Cape Town and convened a public meeting for the purpose of starting a company. He was successful. It was estimated that the cost of the finished structure would be £6,000. Of this, £4,000 were soon raised and the work commenced but during the ensuing two years it progressed slowly. It was in the days of the Government's poverty and so no assistance could be got from that source but a small piece of sandy beach and permission to use some convict labour.
As the ship concerned was only wrecked in August 1837, this could not have been the case. (14) The mistake seems to have come from misunderstood commas in the original source which must have been Chase's The Cape of Good Hope and the Eastern Province of Algoa Bay: (15)

The inconvenience, expense, and injury to property by damage of sea-water...induced the merchants of the port in 1837 to attempt the experiment of a jetty, and having driven fourteen trial piles alongside of a wreck, which bore the fury of the surf uninjured for two years, they called the attention of the public to the expediency and advantages of such an undertaking, and formed a company for the purpose of raising £6000, by 600 shares of £10 each.

Cory's interpretation changes the whole concept behind how the first jetty was developed. In his version it was observed that a wreck had survived in the surf for two years. Thus in 1837 a start was made on a jetty using the wreck as a base. For some unaccountable reason the project took two years to really get going, which Cory weakly explains away: "In October, 1839, however, a fresh spurt was made". (16)

As the FEEJEE was only wrecked in 1837, it is obvious that a trial structure was first built using the wreck as a base to prove that a jetty was indeed feasible. Meanwhile Thornhill and his associates launched the Port Elizabeth Jetty Company in March 1838. But the start to jetty construction proper was delayed until 1839 because of difficulties experienced getting the widely dispersed country shareholders to sign the company's trust deed. (17) The fact that the temporary structure had survived two years in the surf must have reassured the promoters as to the scheme's viability.
9.2 LIGHTHOUSES:

Recife Lighthouse: 1851

Cape Recife [18] was originally called "Cabo da Roca" - Cape of the Rock - by Dias in 1488. But by 1502 it was marked on maps as "Cabo do Arrecife" - Cape of the Reef. [19] The issue of erecting some kind of marker at Cape Recife was first raised in 1811 to little avail. Even an offer by a Captain Callender in 1819 to build a lighthouse there at his own expense was turned down as it was considered a government project. [20] After Moresby surveyed the eastern coast as far as the Keiskamma River in 1820, he recommended that a lighthouse be built at Cape Recife to safeguard the coasting trade. [21]

The subject was next raised in 1826 by the customs official at Port Elizabeth, William Dunn. "The whole expense of keeping up a humble Light would cheerfully be paid by the Coasters & such is the general anxiety manifested by every-one conversant on the subject, that I have no doubt sufficient private subscriptions might be obtained to build a Cottage Light house". Oil for the light could be obtained from the nearby whale fishery. [22]

The lighthouse issue was taken a step further in August 1827. After a meeting at Robinson's Hotel under the chairmanship of Captain Evatt, a petition was submitted requesting that one be built on the western shore of Algoa Bay at public expense. Frederick Korsten even offered to donate the necessary land. [23] The idea was supported in the 1828 commission of inquiry report on Cape trade and harbour facilities. [24]

At the beginning of 1835 another memorial was submitted calling for a lighthouse at Cape Recife. [25] Although similar to the 1827 memorial, it was timed to coincide with one of the governor's visits to the frontier. In an attempt to influence him, an elaborate picnic was organised for him at Cape Recife in January 1835 and the proposed lighthouse site named D'Urban rock. But it was all to no avail. Instead Selwyn's Beacon [26] was built on the Hummock, the hillock at the centre of the peninsula. It was merely a pole surmounted by a barrel. [27]

After 1837 jetty construction at Port Elizabeth diverted local attention away from Cape Recife. The next move came from the government who were intent on generally improving communications at the Cape. [28] However, its scheme for opening mountain passes, coupled with lighthouse construction, convinced the secretary of state that the chief engineer, Charles Michell, "was merely an enthusiast out to squander money". [29] Thus permission was refused. Undaunted, Michell continued to actively campaign for lighthouses until Lord John Russell ordered him to prepare estimates for Cape Recife, Cape Agulhas, Simon's Bay and Mouille Point. [30] He submitted his £12848 Recife plan to the British government in July 1842. [31]

The scheme eventually got off the ground in February 1848 when the secretary to government, John Montagu (1843-52), personally chose the site and commissioned a local architect to draw up plans which were then submitted to Cape Town. In July it was reported that the project
would be started within a month of the completion of the Agulhas lighthouse. (32) The government engineer, Captain George Pilkington, arrived early in 1849 but to everyone's disappointment "came in the morning and departed after a few hours stay". (33) He, however, returned in April. Despite local scepticism, in June it was announced that Pilkington's plan for the the Recife lighthouse was to be started immediately. (34) In August the tower's foundations were thrown. (35)

At the same time as construction got under way at Cape Recife, moves were made to resurvey the area. But the Navy was unwilling to do this without admiralty permission as a survey had been done by Captain Owen in 1826. (36) Meanwhile the ex-harbour master, Jamison, now at Simon's Town, was asked to report on the subject and confirmed the need for a resurvey. (37) The Cape Royal Astronomer, Thomas Maclear, had also been consulted as to where to place the lighthouse. (38) Ultimately it was decided that Owen's chart was sufficiently accurate to pinpoint the lighthouse's position but the problem was that it was on too small a scale to show the dangerous rocks. (39) In July 1850, as the lighthouse neared completion, the government again asked the navy to assist in surveying Cape Recife. (40) The following month the government engineer was ordered to remove the obsolete beacon at Cape Recife. (41)

The Recife lighthouse was completed by early March 1851. (42) Henry Switzer of Cape Town was appointed first lighthouse keeper with Henry Jenkins as his assistant. (43) It was officially lit for the first time on April 1. (44) In 1855 the admiralty surveyor, Lt Joseph Dayman noted that the Recife lighthouse was cut off from the keepers' cottage at high tide, making their work unnecessarily difficult. (45) In 1856 the newly appointed harbour master, Lt H G Simpson, initiated a scheme to open up communications with the Recife lighthouse by means of a signal station. (46)

Bird Island Lighthouse: 1852
The construction of a wooden lighthouse at the eastern end of Bird Island towards the end 1852 was a largely unwanted improvement. (47) It was first lit on November 28. (48)

Donkin Lighthouse: 1861
While the Recife lighthouse was being planned, the harbour board also tried to entice the government into building a lighthouse on the hill at Port Elizabeth itself. (49) The project was actively supported by the secretary to government, John Montagu (1843-52). (50) But the governor was "unable at the present moment to estimate for this work, but I hope to do so shortly". (51)

The matter was raised again in the mid-1850s when the admiralty surveyor, Lt Joseph Dayman, pointed out that a lighthouse near the Donkin memorial would be invaluable to shipping at night. (52) The project, however, did not get off the ground until early 1857 when the matter was discussed by the harbour master, H G Simpson, and assistant government engineer, Matthew Woodifield. (53) In October Woodifield arranged to look for a suitable light while in England. (54) In September 1858 the harbour master reported that the
mechanism for the proposed harbour light had arrived. This event was followed in November by good news when the executive council announced that "the light will be treated as a public one, and [the] cost of it will be borne by the General Revenue." (55) In December the harbour master upset public opinion by suggesting that the crumbling Donkin pyramid be pulled down and the stones used to build the lighthouse. The proposal resulted in the monument's restoration. (56)

But almost another year went by before it was actually decided to build the lighthouse on the Donkin site. (57) Initially the delay resulted from waiting for the British government to decide whether it or the Cape government was responsible for the cost of construction and maintenance. Once this was resolved, the decision had to be taken as to where to put it: on the port office or Donkin. The harbour master estimated the respective costs to be £150 and £350. (58) He felt that the light was to be specifically an aid to ships wanting to anchor at night, rather than it being a general extension of the existing aids to coastal navigation. The port office scheme was eventually scrapped when it was found that the existing building was not capable of supporting the extra weight. (59)

Subsequently the Port Elizabeth municipal commissioners delayed matters by raising the question of the right to build on the Donkin reserve which had been declared a public place in 1821. (60) They eventually gave approval in November and the harbour board undertook to build the lighthouse on behalf of the government for £350. The lantern had cost £217 13s 3d in 1858. (61)

Another nine months were to pass before the go ahead was given for construction to commence. (62) Because the government engineer's plan included accommodation "not contemplated in the original plan" and would therefore exceed the original estimate, the lieutenant governor had ordered that the project wait until parliament reconsidered the matter. (63)

Finally in May 1860 the harbour board engineer, Alfred Warren, was given instructions to start the 17-metre lighthouse "forthwith". (64) It was completed a year later and came into operation on June 1, 1861. (65) As a result new sailing directions for Algoa bay were issued. (66) The harbour board submitted its account of £942 18s 5d to the government which was £120 13s 1d more than the estimate. "The extra expense has arisen chiefly from the difficulty of procuring the stone for the plinth and the expensive process of dressing it." The plinth was eventually provided by local building contractor, Charles Inggs, for £66 16s 1d. (67)

Time Ball: 1865

During 1862 the harbour board made inquiries into the possibility of placing a time signal on the Donkin lighthouse. It was to be activated from Cape Town by telegraph, then still under construction. The initial cost was estimated to be less than £300, with a further £150 a year for maintenance. (68) In March 1863 steps were taken to ascertain the cost of the time ball itself. (69) Early in 1864 the harbour board again appealed to government to finance a time signal on the Donkin lighthouse. (70)
SIGNAL BALL AT DONKIN Lighthouse (1860s)

Port Elizabeth Public Library
The time ball was eventually put into place during July 1865. (71) It was officially dropped for the first time at 1 o'clock on August 26 by a signal from the observatory at Cape Town. The *Herald* reported: (72)

If we mistake not, this is a "feat" in the history of electric telegraph science hitherto unaccomplished... In no part of the world, we believe, has there been a time-ball dropped... at a distance of five hundred miles by one through current.

The ball itself was made of wicker-work covered with black painted canvas. It was 1.2 metres in diameter and fixed to a 4.3-metre iron bar which swivelled on a framework attached to the lighthouse gallery. When not in use, the ball hung downwards with the shorter arm of the bar uppermost. Just before 1 o'clock Cape mean time each day - except Sundays and public holidays - it was hauled uppermost ready to be dropped when the trigger was electrically activated from Cape Town. It was noted, however, that the "correct mean time is 1 hour 28 minutes 34.6 seconds". (73)

Despite this technological advancement, early in 1866 the harbour board had to report that "the irregularities in its discharge have been so numerous that its value to the shipping has been seriously impeded." (74) These teething problems were overcome and the following year the board was able to report "the more satisfactory working of the time signal, which, under the supervision of the harbour master, Mr. Skead, has become a most valuable addition to the port". (75)

**Dispatch Rock Beacon:**

The dangerous Dispatch rock [76] near Cape Recife, first observed in 1803, was only noted on admiralty charts in 1818. (77) After receiving complaints about the danger of Roman rock, the first port captain, David Francis (1828-31), investigated the matter and in May 1829 recommended that a warning buoy be put in place without delay. He also advised that beacons should be set up on the shore to indicate the rock's position. (78) The matter was referred to the Table Bay port captain, James Bance, who rejected the buoy because it would soon be washed away. He supported the beacon scheme which he estimated would cost under £11. (79) Thus permission was granted for them to be erected. (80)

A suggestion by Captain J Ward in 1830 that a beacon be built on a hill between capes Recife and St Francis was rejected by the government as "no advantage would be derived from the erection of such a Landmark". (81)

In 1850 the government engineer was ordered to build a stone beacon between the nearly completed Recife lighthouse and Roman rock. The latter's beacons were to be moved to a more visible site higher up the hill. At the same time he was to have a white diamond painted on the southeast corner of Fort Frederick and a mast added to make it more conspicuous. (82)
After his 1855 survey of Algoa Bay for the admiralty, Lt Joseph Dayman noted that the Roman rock beacons were too close together to be of any use. Being only 50 metres apart, they could not easily be lined up from a ship. To remedy this, he recommended that the inner beacon should be moved about 1200 metres inshore. These and the red beacon near the Recife lighthouse would be made more visible from the sea by the addition of iron baskets. (83)

During July 1857 the assistant colonial engineer at Port Elizabeth, Matthew Woodifield, was instructed by his superiors to replace the pole beacons on Dispatch/Roman rock with stone pillars. (84) He set about getting permission from the owner of the Gomery farm, W B Frames. (85) Although Woodifield estimated the cost to be £220, J Proudfoot's tender of £300 was eventually accepted. (86)

In 1859 Woodifield's recommendation, that a third Dispatch/Roman rock beacon be built, was agreed to by the government. His estimate of £200 was accepted and the money granted. (87) Proudfoot's tender of £500 was rejected as being too "extravagant". (88) Construction started in April and the job completed for £198 9s 9d by August. (89)
9.3 **SUBSEQUENT SCHEMES: 1870-1922**

Although Coode's scheme was never implemented, one that was submitted by his firm after his death became the basis of the present breakwater. But Port Elizabeth had to wait until the 1920s for work on an enclosed harbour to begin. In the meantime port facilities were limited to the replacement of the wooden Barkly jetty (1869-72) by the iron North jetty (1878-83) and the construction of the South (1882-84) and Dom Pedro (1899-1902) jetties. In addition an aerial way and staging for handling explosives was built at North End (1898-99) and a patent slipway was constructed at Happy Valley [90] (1897-1903). The jetties were all extended and widened from time to time. (91)

In the shorter term nothing was immediately done to implement Coode's 1870 scheme apart from the continued dismantling of the breakwater and the widening of the jetty to 18.3 metres in 1873. (92) Only in June 1875 did parliament eventually authorise the construction of the first phase without delay'. (93) This consisted of the outer jetty and the retaining bank south of the Baakens. The works were placed under Coode's direction and he appointed William Shield as resident engineer.

Meanwhile, the government had begun to badger the harbour board about reimbursing the money spent on its behalf by the public works department. The board, already peeved by the fact that they had not been consulted by the takeover, took exception to the "tone adopted by the Government". (94) This and the proposed return of control of the works to the board, saw practically all its members resign. (95) Undaunted the government appointed new members who officially took over the plant and material from Bisset and settled the "long and intricate account between the late Board and the Government for work done". (96) The amount settled on was £44984 13s 5d. In the meantime all work, apart from maintenance, was suspended pending Shield's arrival. But even before this could take place, the board decided that Coode should personally inspect the works. (97) Shield arrived from England in February 1876 and immediately set about making a working survey of the area. He also reorganised the quarry railway and work yard for the most ready and economical execution not only of the Retaining Bank, but also of such other works as might follow". (98) At about the same time, the harbour board's secretary, Thomas Wormald, was replaced by Nelson Girldiestone after 21 years service. (99)

In due course, Coode arrived from England and spent five weeks between December 1876 and February 1877 making "personal observations...more especially on such matters as bore upon the question of sand-travel along the sea frontage between the extreme north and south ends of the town". (100) He found that an unprotected No 1 jetty was of limited utility. It was not uncommon for bad weather to interrupt its use for three to four successive days. In any event, "for all practical purposes the whole, of the heavy traffic is conducted by means of surf-boats...upon that portion of the beach which lies within a distance of 300 yards [101] to the north of the Baaken's River." (102)
COODE SCHEME - PHASE 1 (1872)

Annexures to Votes and Proceedings of Parliament (G28/1872)
Having seen local conditions, Coode had second thoughts about his initial plan. Apart from the retaining wall which by now had almost been completed, he scrapped the entire scheme. Instead he proposed a massive £919160 project which entailed a 610m breakwater at the end of a 914m open iron viaduct to protect the jetty and beach.[103] Although the harbour board recommended that this new plan be adopted, the government was not prepared to consider such an expensive project. It did, however, accept the harbour board's alternative proposal that the wooden jetty be replaced by an extended £27000 iron one. As Robinson had predicted in 1871, No 1 jetty was by now in an "unsatisfactory condition".[104] The project was sanctioned by parliament and the necessary funds were provided under Act 17 of 1878.[105] The contract to supply the necessary materials was awarded to Head, Wrightson and Co of Stockton-on-Tees. The jetty's cranes were ordered from Stothert and Pitt of Bath.[106]

The government then decided that "a system of jetties" would be all that was necessary to meet Port Elizabeth's requirements.[107] Thus Act 14 of 1879 permitted the harbour board to raise a further £100000 to meet the expense "of constructing additional jetties, wharves, or other such works as may be necessary to facilitate landing and shipping operations".[108] Under it the harbour board proposed to spend £85000 on:

1. Extending the existing 183-metre iron jetty by 61 metres.
2. An iron jetty from the retaining bank south of the Baakens.
3. A ballasting and watering jetty immediately south of No 1 jetty.
4. An iron bridge over the Baakens.

In December 1879 the commissioner of public works sanctioned everything except the ballasting jetty. Plans were drawn up and submitted to the government and consulting engineer for approval. In February 1880 Coode voiced his disapproval of the retaining bank jetty "unless outer works are abandoned for all time".[110]

At the suggestion of the Port Elizabeth chamber of commerce, the whole issue was referred to a conference of engineers in London. In the meantime all proposed work was suspended. In July the engineers, Sir John Hawkshaw, James Brunlees and Coode, recommended that the 1877 plan be adopted and, in addition, a steam tug be purchased.[111] Although the harbour board endorsed this decision, the harbour master, F Skead (1865-88), dissented from the majority recommendation on the grounds that the Coode scheme was merely an enlarged version of the abortive breakwater. Therefore it could only succumb to the same fate.[112] The matter was thus referred back to the London engineers.[113] In May 1881 they confirmed their recommendation that the scheme should be undertaken. Subsequently Skead submitted more evidence to prove his point.[114]

By this time the government had been sufficiently put off the scheme to recommend that the whole issue of outer harbour works be reconsidered by parliament. In August 1881, to ease the port's immediate problems, the government and the harbour board agreed that the jetty from the retaining wall should be built. The crown agents in London were instructed to make a requisition for the necessary
COMPARISON BETWEEN OLD BREAKWATER AND COODE SCHEME (1881)
materials. Coode once again objected but the board was adamant that it should be built. (115) Meanwhile, the £4947 Baakens bridge was completed towards the end of 1881. (116) In July 1882 the contract for the supply of materials for the South jetty was awarded to the Horseley Iron Company for £28500. It was to be 244 metres long and the total estimated cost was £51000. (117) In October 1882 the harbour board requested the government, yet again, to introduce a bill into parliament "to provide for the execution of the Outer Harbour Works at this Port as have been already recommended by Sir John Coode". (118) This time the commissioner of public works, J X Merriman, felt that it would "not be courteous to forward a mere refusal". (119) He thus gave the following reasons for the scheme not being undertaken:

1. Railway construction came before harbour development - the burden of the railway debt made it currently impossible to raise a loan for harbour development.
2. There was too much difference of opinion on the nature of the works themselves - pending Coode's proposed modifications, his 1877 scheme provided no wharfage space, merely shelter, thus landing and shipping costs would hardly be affected.

The harbour board refuted both points. (120) In February 1883, Coode submitted his modified plan. This time he envisaged a 10.9 hectare outer basin connected to the shore by a 792-metre open viaduct. The estimated cost was £1170950. (121) But this too never got beyond his drawing board. As recommended by the conference of engineers, the harbour board's steam tug, the JOHN PATERSON, arrived from England in April 1883. It was chiefly used to tow cargo boats - "a service which has so far resulted in a loss". (122) The 64-metre extension to the North jetty was completed during 1883. Its total cost was £57627. (123) The South Jetty was finished in July 1884 and its total cost was £49322. With all the authorised new works now completed, Coode's services were terminated on June 30 and Shield returned to England in August. (124) Shield's services had cost the board £1000 a year and £200 for a house. When he left he got six month's salary as a bonus. (125)

In 1890 Coode was reappointed consulting engineer when it was decided to extend the North jetty by 73 metres and replace the steam cranes with hydraulic ones. (126) He, however, died before any further steps could be taken to provide Port Elizabeth with an enclosed harbour. (127) A host of schemes were submitted but none were implemented. (128) As it was the whole issue had to wait until 1913 when a commission of engineers recommended that a southern breakwater along the lines of the one proposed by Coode, Son and Matthews in 1897 be built. In 1914 parliament sanctioned a £1.5 million project based on the 1913 recommendations, modified by Colonel G T Nicholson. But the outbreak of World War I delayed its implementation. (129) Eventually, the first concrete block of the present breakwater was laid on November 2, 1922. (130)
### PORT ELIZABETH PORT CAPTAIN
1828-1831

<table>
<thead>
<tr>
<th>Name</th>
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</tr>
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### PORT ELIZABETH HARBOUR MASTERS
1831-1870

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</tr>
<tr>
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</tr>
<tr>
<td>T W Gubb (acting)</td>
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<tr>
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<td>16/11/1845 [135]</td>
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<td>T A Bennet</td>
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<tr>
<td>H G Simpson</td>
<td>26/11/1855 [138]</td>
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<td>G Wilson (acting)</td>
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</tr>
<tr>
<td>F Skead</td>
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</table>
9.5 MANBY'S APPARATUS:

While the whole issue of harbour facilities was being debated in the 1840s, two black southeasters during 1846 reminded everyone of the vulnerability of shipping. During March a gale forced three ships ashore (141) and a subscription list was immediately opened for a Manby's apparatus. Originally invented by Captain G W Manby in 1807, the apparatus consisted of a light mortar which was used to propel a line, attached to the shot, from the shore to a vessel in distress. (142) Before anything more could be done in Port Elizabeth, a violent gale in October wrecked five ships. (143)

The immediate result was to divert local energy into improving life-saving facilities. The Manby's apparatus subscription was reopened while the government granted £1182 10s 10d towards the setting-up of a lifeboat station under the harbour master. (144) Regulations pertaining to the lifeboat were published by the lieutenant governor in October 1847. (145) The nine-metre lifeboat was built locally by W & R Kemsley for £175 from plans furnished by the harbour master, Lt Jamison. (146) The Manby's apparatus arrived in September 1847 aboard the VISCONT HAMDON. It cost £44 15s 6d but £79 15s had been subscribed, £30 14s of which had come from Grahamstown. (147) It was first tested on September 25. Charged with 227g of gunpowder, the mortar threw the first shot 230 metres along the beach. The second threw a line over the prow of the wreck of HMS THUNDERBOLT (148) which had been beached in February after striking a reef off Cape Recife. (149)
9.6 VICTORIA QUAY: 1857

While busy building the Recife lighthouse from 1849-50, the government engineer, Captain George Pilkington, turned his attention to Port Elizabeth's beachfront. He believed that by building a seawall from the landing beach towards the South End bight, a large area could be reclaimed and sold to raise as much as £100,000. The scheme was met with enthusiasm and it was proposed that it be called the Victoria Quay "in honor of the Queen whom we all adore". (150) In March 1850 Pilkington surveyed the beach from the old jetty to the bight. It was reckoned that the reclamation would be the most profitable public work ever undertaken if the government agreed to it. The expense would soon be offset as a metre of frontage in Port Elizabeth currently fetched £65. (151)

Work eventually began on the Victoria Quay in 1857. (152) By October 1858 it had been completed as far as Hunt's sawpit and new tenders were called. (153) Isaac Newton's tender of £10 11s 11d per cubic metre was thought to be excessive as the municipal commissioners had to provide materials and some of the labour. (154) Newton agreed to provide labour if the commissioners supplied the material. But he would not reduce his new quote of £17 13s 2d a cubic metre. Thus the tender was readvertised. (155) Although the project was nearly completed, nobody was willing to undertake the work. (156) Tenders were called again and in January 1859 Matthews's tender of £1 3s 6d was accepted for the first 365 metres to Hyman's Kloof (now Russell Road). (157) Soon it was decided that the contractor could not be held to the agreed time schedule of 7.3 metres a day because of the shortage of stone. It was estimated the contract was worth £6000.

By April work had not started and the commissioners decided to engage its own men to do the work. Within three weeks 30 metres had been built. (158) By January 1860 the seawall was completed to the south end of J O Smith's property. (159) In August the town engineer reported that the works "have been brought to a close". (160) A total of £3418 was spent on the project between 1855 and the end of 1860. This had been offset by £1668 from the sale of land etc. (161) But in early 1861 the town council's sea wall committee recommended that it be continued as far as Hyman's Kloof. Thus Matthews recommenced work and in July he was paid £109 16s 11d. (162)
9.7 SWIMMING AT THE BREAKWATER: 1866

At the beginning of 1866 the harbour board provided a swimming place for men beneath the shield. A stage was built in one of the bays formed between the sets of piles and the sea-wall:(163)

Altogether it is a capital place for bathing, at least for those who can swim. You leap from the steps into twenty feet of perfectly still salt water, and can enjoy the luxury and benefit of a salt water bath, without any of the désagréables that attend the practice of bathing on the open beach. The crowds that frequent the spot early in the morning and in the dusk of the evening testify how much the convenience is appreciated.

It was hoped that a similar facility would be shortly built for women:(164)

Here is a sea-port without the possibility of a lady enjoying the luxury of sea-bathing, except by trudging two or three miles along the beach, and then the open beach must be used... Were something of this kind made, we feel satisfied that it would be a great inducement for country residents to visit the town during the summer season.

In the interim a strong protest was made "on behalf of all who have any feelings of decency," against the misuse of the men's facility. During the day "when there were many ladies on the breakwater, two men went in and disported themselves in sight of all, within the shield... I trust that immediate measures will be taken by the proper authorities".(165) It was generally felt that swimming should be restricted to before 8am or after sunset which "would afford ample time to all, without depriving ladies of the pleasure of a walk on the breakwater".(166) Soon there was trouble of another kind:(167)

BATHERS near the Breakwater must look out for sharks; there was a fine specimen of the genus disporting itself within the shield yesterday. One or two shots were fired at it, but without effect.

By June 1866 a married couple were appointed to manage the breakwater baths, the wife being employed to attend the lady bathers.(168) A facility had been built for them adjacent to the men's. But while "the ladies from 'early morn till dewy eve,' disport themselves in the placid waters without danger", the men could only swim before 7am or after dusk.(169)
9.8 DRIFTSANDS: 1869

Although not directly connected with his 1868-69 survey for John Coode, one of the things that attracted Charles Neate's attention was the driftsand encroaching eastwards across the Recife peninsula. The 8 kilometre stretch of sand had already reached the highwater mark near the Fishery:

I do not assert that it has been the cause of that deposit of sand which surrounds the Breakwater but I do not hesitate to express the opinion that the action which has taken place there, is but small compared with that which may be looked for, if the progress of this drift is not arrested.

Early in 1869 he recommended that an immediate start be made on planting bush and grass on the dunes to stop the movement as had been done so successfully on the Cape Flats. The harbour board estimated the project would cost £100 a month. Although it was prepared to make an immediate start, the matter was referred to the government for parliament, during the next session, to decide whose responsibility it actually was. The area involved was crown land which was out of the board's jurisdiction. The government in turn referred the matter to the chief inspector of public works.

During July 1869 the town council began work combatting the encroaching driftsand. Pipe grass was successfully planted but little success was obtained from sowing various other types of seed. The park keeper in charge, John Wilson, was pessimistic about the whole project:

I confess that I see little chance of success, as there are hills of sand to windward moving onward that will in a short time destroy all labour that may be expended...as I had anticipated...the supply was kept up from the ocean...

[There are] gullies along which the sand is driven on to the Duin by the north-west winds... It is quite probable that the sand might be arrested by building substantial walls at the entrance of these gullies, well backed with earth and planted with hardy shrubs.

He felt that the project was on too gigantic a scale for the town council to undertake successfully. He therefore recommended that their present attempt be abandoned until the government granted money and approached a marine engineer for advice.

The Recife drift sands were eventually tamed by James Storr Lister's scheme during the 1890s which used Port Elizabeth's rubbish as a stabilising agent.
9.9 CUSTOMS HOUSE:

When Port Elizabeth's first customs official, William Dunn (1821-27), arrived in December 1821, he was given one of the old wooden garrison buildings dating back to the first British occupation (1795-1803) to use as a customs house. By February 1822, however, a quote of R$34500 for a new building was accepted from H Schutte. But a delayed start saw the government take the opportunity in April 1823 to order Schutte to build it at the Kowie instead. Construction started there in August 1824 and the building was completed by the end of the year. Thus Dunn was left with the old military building. In 1824 a request for a new building was supported by the local landdrost, J G Cuyler, but Dunn had to be satisfied with permission being granted in April 1825 for him to hire Hunt's house as a combination customs house, post office and residence. The annual rent was R$60.

By 1826 support for the Kowie as the major eastern Cape port was on the wane. The commissioners of inquiry decided that a collector should be appointed at Port Elizabeth and a separate customs house established where "the custom duties received in the eastern province may be accounted for in the same manner as those in Cape Town." They felt Algoa Bay was more "attractive to shipping" in addition to being close to Uitenhage where they proposed to have the seat of government. It was recommended, however, that a customs officer continued to be appointed at Port Frances, "who should report to and act under the orders of the collector at Port Elizabeth". The whole move was to be financed by trimming £900 off the salaries of customs and port officials in the western Cape.

D P Francis was appointed Port Elizabeth's first collector of customs and port captain in 1828. By 1831 it was decided to create the separate post of harbour master. Edward Wallace duly arrived in November and took over the port office from Francis. But it was found that the customs office was too small for both of them. Thus Francis suggested that Wallace operate from the two buildings used to house the port boatmen which was conveniently near the landing beach.

Fifteen years later Port Elizabeth still did not have a customs house specifically built as one. Early in 1846 the customs department moved into a wing of the recently completed Commercial Hall which it rented for £45 a year. The other wing was occupied by a reading club for £30 a year. However, the centre room, one of the largest in the eastern Cape, had never been put to the use for which it had been designed. In August 1846 tenders were called for it and the south wing's hire.

Eventually in 1865 a start was made on constructing a customs house. The foundation stone was laid by the sub-collector, F B Pinney, on March 22. The Italian-style building was designed by Alfred Warren and built by Charles Inggs. But objections from the government had seen it reduced from three to two floors. The building was handed over to the customs department on June 18, 1866, "replete with every convenience, and a credit to its designer, Mr. A. Warren, and Mr Inggs (sic), the builder."
CUSTOMS HOUSE (1860s)

Port Elizabeth Public Library
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**Table 1**

1829-70

Imports & Exports Through Port Elizabeth & Cape Town (186)
### TABLE 2

**EXPORTS OF COLONIAL PRODUCE THROUGH PORT ELIZABETH 1829-70**

(£)

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**SOURCE:** Cape of Good Hope Blue Books for the relevant years. (187)
### TABLE 3

PORT ELIZABETH IMPORTS & EXPORTS VIA CAPE TOWN
1829-33

\( (£) \)

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<thead>
<tr>
<th>Year</th>
<th>Port Elizabeth Imports</th>
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<th>Cape Town Exports</th>
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**Source:** Cape of Good Hope Blue Books for the relevant years
## TABLE 4
GROWTH OF PORT ELIZABETH'S IMPORT & EXPORT TRADE [188] 1829-70 (£)

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**SOURCE:** CSIR Blue Books for appropriate years
### Table 6
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* Bags or packs

**Source:** Cape of Good Hope Blue Book for relevant years [190]
### TABLE 7

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**SOURCE:** Cape of Good Hope Blue Book for relevant years (191)
### TABLE 8

**SPREAD OF WOOLLED SHEEP IN THE EASTERN CAPE [192]**

**1846-65**

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**SOURCE:** Cape of Good Hope Blue Book for appropriate year
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SOURCE: Cape of Good Hope Blue Book for appropriate years (193)
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**SOURCE:** Cape of Good Hope Blue Book for relevant year
# APPENDIX 10

## TABLE 11

WAGON TRANSPORT COSTS FROM PORT ELIZABETH 1851-70 (shillings/45kg)

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TABLE 12

PORT ELIZABETH BOATING COMPANY SHARES
1857-69
(£/s/d)

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<td>4/0/0</td>
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<tr>
<td>1866</td>
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<td>7/15/0</td>
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<td>5/10/0</td>
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<tr>
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<td>0/10/0</td>
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<td>5/10/0</td>
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<tr>
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<td>4/0/0</td>
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SOURCE: EP Herald and PE Telegraph for relevant years (194)

<table>
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<tr>
<th>Company</th>
<th>No of Shares</th>
<th>Reserves</th>
<th>Subscribed</th>
<th>Amount Paid Up</th>
<th>Selling Price</th>
<th>Last Dividend</th>
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<tr>
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<td>25</td>
<td>25</td>
<td>60</td>
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<td>1800</td>
<td>20</td>
<td>20</td>
<td>30</td>
<td>4/0/0</td>
</tr>
<tr>
<td>1865 PE Boating Co</td>
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<td>25</td>
<td>25</td>
<td>25</td>
<td>45</td>
<td>0/0/0</td>
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<td>2000</td>
<td>20</td>
<td>20</td>
<td>35</td>
<td>3/10/0</td>
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<td>2271</td>
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<td>3</td>
<td>8</td>
<td>0/15/0</td>
</tr>
<tr>
<td>Union Boating Co</td>
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<td>1000</td>
<td>10</td>
<td>2</td>
<td>5</td>
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</tr>
<tr>
<td>1868 PE Boating Co</td>
<td>400</td>
<td>9889</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>1/0/0</td>
</tr>
<tr>
<td>EP Boating Co</td>
<td>300</td>
<td>4331</td>
<td>20</td>
<td>20</td>
<td>28</td>
<td>4/0/0</td>
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<tr>
<td>Algoma Bay L&amp;S Co</td>
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<td>3</td>
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<td>17</td>
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SOURCE: EP Herald and PE Telegraph for relevant years (195)
### TABLE 13

**MFENGU BEACH LABOURER WAGES [196]**

1840-57

<table>
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<tr>
<th>Year</th>
<th>Mfengu beach labourers</th>
<th>Local - Farm: servant</th>
<th>- Domestic (male)</th>
<th>- Artisan</th>
<th>Harbour - Harbour Master</th>
<th>- Coxswain</th>
<th>- Boatmen</th>
<th>Cape - Farm: servant</th>
<th>- Domestic (male)</th>
<th>- Artisan</th>
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<tr>
<td></td>
<td>3s 3s 6d 6s 6s 6d 6d</td>
<td>1s 9d 7d 8d 7s 11d</td>
<td>2s 3d 1s 6d 3s 9d</td>
<td></td>
<td>6s 5d 9s 7d 12s 9d 20s 9d</td>
<td>2s 4d 3s 1d 3s 10d 3s 10d</td>
<td>1s 9d 2s 4d 2s 7d 3s 2d 3s 2d</td>
<td>8d 6d 7d</td>
<td>1s 7d 1s 5d 1s 7d</td>
<td>8d 9d 9d</td>
</tr>
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</table>

**COMPARATIVE WAGE INDEX**

(Mfengu wages = 100)

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<tr>
<th>Year</th>
<th>Mfengu beach labourers</th>
<th>Local - Farm: servant</th>
<th>- Domestic (male)</th>
<th>- Artisan</th>
<th>Harbour - Harbour Master</th>
<th>- Coxswain</th>
<th>- Boatmen</th>
<th>Cape - Farm: servant</th>
<th>- Domestic (male)</th>
<th>- Artisan</th>
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<tr>
<td></td>
<td>100 100 100 100 100</td>
<td>58 16 11 9 14</td>
<td>33 50 67</td>
<td></td>
<td>213 274 160 197 319</td>
<td>77 88 51 59 59</td>
<td>58 66 43 49 49</td>
<td>11 8 8</td>
<td>33 39 38</td>
<td>38 85</td>
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</table>

**SOURCE:** Cape of Good Hope Blue Book for the relevant years (197)
| Year | Bank Interest | Debentures 500 lms. | Debentures 100 lms. | Debentures paid off | Wharfage | Land Government | Land Revenue | Government Grant | Land Revenue | Debentures 500 lms. | Debentures 100 lms. | Debentures paid off | Wharfage | Land Government | Land Revenue | Government Grant | Land Revenue |
|------|----------------|---------------------|---------------------|---------------------|----------|----------------|-------------|----------------|-------------|----------------|----------------|----------------|----------------|----------|----------------|-------------|----------------|-------------|
| 1865 | 250            | 100                 | 50                  | 75                  | 200      | 100            | 100         | 50             | 100         | 200            | 50             | 75             | 100      | 200           | 100         | 50            | 100         |
| 1866 | 220            | 100                 | 50                  | 75                  | 200      | 100            | 100         | 50             | 100         | 200            | 50             | 75             | 100      | 200           | 100         | 50            | 100         |
| 1867 | 200            | 100                 | 50                  | 75                  | 200      | 100            | 100         | 50             | 100         | 200            | 50             | 75             | 100      | 200           | 100         | 50            | 100         |
| 1868 | 180            | 100                 | 50                  | 75                  | 200      | 100            | 100         | 50             | 100         | 200            | 50             | 75             | 100      | 200           | 100         | 50            | 100         |
| 1869 | 160            | 100                 | 50                  | 75                  | 200      | 100            | 100         | 50             | 100         | 200            | 50             | 75             | 100      | 200           | 100         | 50            | 100         |
| 1870 | 140            | 100                 | 50                  | 75                  | 200      | 100            | 100         | 50             | 100         | 200            | 50             | 75             | 100      | 200           | 100         | 50            | 100         |

**Table 14**

**Port Elizabeth Harbour Board Revenue & Expenditure**

---

*Page 275*
### TABLE 15
ANALYSIS OF PE HARBOUR BOARD REVENUE & EXPENDITURE
1856-70
(£)

**REVENUE:**

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<th></th>
<th>1856-60</th>
<th>% 1861-65</th>
<th>% 1866-70</th>
<th>% 1856-67</th>
<th>% 1856-70</th>
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<td>33448</td>
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<td>58873</td>
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<td>3223</td>
<td>3</td>
<td>3459</td>
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<td>Ballast</td>
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<td>1</td>
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<td>3856</td>
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<td>65325</td>
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<td>108455</td>
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**EXPENDITURE:**

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<th>% 1866-70</th>
<th>% 1856-67</th>
<th>% 1856-70</th>
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<td>89854</td>
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<td>48</td>
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**SOURCE:** Table 14
## APPENDIX 10

### TABLE 16

**COST OF DISMANTLING THE PORT ELIZABETH BREAKWATER 1869-84 (£)**

#### KNOWN HARBOUR CONSTRUCTION COSTS:

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<thead>
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<th>Project: (198)</th>
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</table>

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<tr>
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<td>46</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>9099</strong></td>
<td><strong>100</strong></td>
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<table>
<thead>
<tr>
<th>Project: (200)</th>
<th>1876-84</th>
<th>%</th>
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<tbody>
<tr>
<td>Breakwater</td>
<td>31441</td>
<td>12</td>
</tr>
<tr>
<td>North Jetty</td>
<td>57627</td>
<td>22</td>
</tr>
<tr>
<td>South Jetty</td>
<td>49322</td>
<td>18</td>
</tr>
<tr>
<td>South Bank</td>
<td>64515</td>
<td>24</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>267340</strong></td>
<td><strong>100</strong></td>
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#### ESTIMATED AMOUNT SPENT ON BREAKWATER REMOVAL:

<table>
<thead>
<tr>
<th>Period</th>
<th>Estimated Removal Costs [201]</th>
<th>Actual Breakwater Costs [202]</th>
<th>%</th>
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<tbody>
<tr>
<td>1869-71</td>
<td>1783</td>
<td>8103</td>
<td>22</td>
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<td>1871-75</td>
<td>6173</td>
<td>46299</td>
<td>13</td>
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<td>1876-84</td>
<td>31441</td>
<td>267340</td>
<td>12</td>
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<td><strong>1869-84</strong></td>
<td><strong>39397</strong></td>
<td><strong>322988</strong></td>
<td><strong>12</strong></td>
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**Sources:** See footnotes
### APPENDIX 10

**TABLE 17**

**CORPORATE BODY LOANS AND CAPE PUBLIC DEBT 1859–85 (£)**

<table>
<thead>
<tr>
<th>Year</th>
<th>General</th>
<th>Corporate</th>
<th>Total</th>
<th>% Corporate</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Govern</td>
<td>Debt [203]</td>
<td>Public Debt</td>
<td>Bodies</td>
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<tr>
<td>1859</td>
<td>101250</td>
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<td>1862</td>
<td>577550</td>
<td>834550</td>
<td>141205</td>
<td>7</td>
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<td>1863</td>
<td>751550</td>
<td>1009550</td>
<td>176110</td>
<td>9</td>
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<td>1864</td>
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<td>10</td>
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<td>214425</td>
<td>10</td>
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<td>1867</td>
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<td>273553</td>
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<td>303443</td>
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<td>1874</td>
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<td>1878</td>
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<td>9527459</td>
<td>10017409</td>
<td>1094499</td>
<td>28</td>
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<tr>
<td>1880</td>
<td>10583759</td>
<td>11391809</td>
<td>2237564</td>
<td>29</td>
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<tr>
<td>1881</td>
<td>12460559</td>
<td>13261709</td>
<td>2572229</td>
<td>29</td>
</tr>
<tr>
<td>1882</td>
<td>15302759</td>
<td>16098409</td>
<td>2140119</td>
<td>29</td>
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<td>1883</td>
<td>19671859</td>
<td>20811009</td>
<td>3048289</td>
<td>31</td>
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<td>19658267</td>
<td>20804352</td>
<td>3046293</td>
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<td>1885</td>
<td>20417227</td>
<td>21672162</td>
<td>4218441</td>
<td>34</td>
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</tbody>
</table>

**SOURCE:** Cape of Good Hope Blue Book (1885) p 241
NOTES ON STATISTICS:

The statistics used in this study have been mostly derived from the Cape of Good Hope Blue Books for the relevant years from 1829 to 1870. This data was supplemented by the summaries that appear in the 1909 Statistical Register and 1917 Union Year Book. There were the following major differences between the summaries and the original Blue Book data:

1829–33: In the Blue Books Port Elizabeth trade via Cape Town was included in both port's totals. Thus to reconcile with the summaries, this figure had to be deducted from both Cape and Cape Town trade.

1831: There is an exact £100,000 difference in total Cape imports. Although no mention is made of a specie import, this could be the reason as the summaries exclude specie. In the absence of any evidence of a specie movement, the higher Blue Book figure has been used.

1841–42: The Blue Book year end was temporarily altered from January 5 to October 10. Thus the Blue Book totals were adopted in preference to those in the summaries to maintain the significance of the breakdowns.

From 1829 to 1859 the Blue Book customs summaries included all exports from each port whereas from 1860 they only reflect the export of colonial produce. Thus to maintain continuity, the export of colonial produce was calculated from the item by item breakdown for the earlier period. Other studies ignore this change in statistical base. However, as a high proportion of Port Elizabeth exports were colonial produce, the difference is not significant.

Where the Blue Books and summaries have been inadequate, a variety of alternative sources were used:

1832: There is no existing Blue Book for this year. Therefore 1832 data has been used from the 1834 South African Almanac and Directory because in other years it used Blue Book statistics in its summaries. Unfortunately the Almanac summary is not sufficiently detailed to be a complete replacement for the missing Blue Book.

1857–60: For this period, the Blue Book format was changed and a variety of useful port-by-port data left out. This was remedied by combining the quarterly customs summaries in the Government Gazette for the relevant years. Detailed Port Elizabeth data was obtained from the Eastern Province Herald and William Fleming's Trade and Statistics of Port Elizabeth, the Sea-Port of Algoa Bay. The totals tally with those in the Blue Books.

1857–69: There is no port-by-port breakdown for wool exports after the 1857 change in format. Thus a number of sources had to be utilised:


1861–62: Mass for each port from the 1866 Almanac, pp 160–61. The value was calculated proportionally from the total value of wool exports in the 1909 Statistical Register.
1863-69: Port Elizabeth wool exports from the civil commissioner's annual reports in the Blue Books 1864-69.

Most of the complications arose from the change of Blue Book format in 1857. From 1823 to 1856 it was prepared from statistics submitted by the various civil commissioners. But expense and doubt as to the accuracy of the figures supplied saw the system abandoned. (204)
FOOTNOTES:

1. Cory vol II p 209
2. F Stell should be F Still
3. GTJ 30/3/1832 p 53
4. ibid p 54
5. See section on First scheme in Early Harbour Development.
6. GTJ 27/1/1832 p 17, 2/3/1832 p 40
7. EPH Special Harbour Supplement, 18/10/1933 p 17. Article by I J Rousseau of the Rhodes University History Department.
10. Redgrave (1947) p 234
11. GTJ 16/3/1832 p 46
12. See section on First scheme in Early Harbour Development.
14. GTJ 19/10/1837 p 2
15. Chase (1843) p 59
16. Cory vol IV pp 253-56
17. See section on First jetty in Early Harbour Development.
18. Commonly spelt Receife or, less frequently, Recife and Recif. Although not listed in recent editions, it is spelt Recife in Official Place Names in the Union and South West Africa (1952) p 74.
20. Soonike (undated) pp 52-54
21. Moresby report (1820)
22. CO 284 No 50 8/8/1826 - Dunn to govt sec
23. CO 326 No 75 21/8/1827 - Evatt to govt sec: enclosures. Petition drawn up and signed by Frederick Korsten, Henry Lovemore, Thomas Williamson, George Herbert and Thomas Pullen.
24. RCC vol XXXV p 287
25. CO 4380 No 216 14/1/1835 - memorial to D'Urban from inhabitants, merchants and naval officers
26. Named after Major Jaspar Selwyn, of the Royal Engineers, in charge of its construction.
28. See section on Roads in Trade.
29. Breitenbach (1958) p 231
30. GTJ 29/7/1841 p 4
31. CO 5306 2/9/1842 - govt sec to Chase, GTJ 22/9/1842 p 2
32. EPH 24/6/1848 p 4, 1/7/1848 p 3
33. EPH 31/3/1849 p 3
34. EPH 9/6/1849 p 2
35. CO 590 20/8/1849, 1/9/1849 - govt eng to govt sec
36. CO 587 11/9/1849 - naval commander-in-chief to governor
37. CO 587 4/10/1849 - Jamison to naval commander-in-chief
38. CO 587 25/9/1849 - Maclear to actg govt sec
39. CO 587 9/11/1849 - naval commander-in-chief to governor
40. CO 5116 8/7/1850 p 2 - govt sec to Fishbourne
41. CO 4938 9/8/1850 p 484 - govt sec to civil engineer
42. CO 603 11/3/1851 - civil engineer to govt sec
43. CO 4940 12/3/1851 p 138 - govt sec to civil engineer
44. EPN 5/4/1851 p 4, 10/5/1851 p 1
45. CO 660 28/12/1855 - admiralty surveyor to naval commander-in-chief, CO 5317 No 4 5/1/1856 - govt sec to PEHB
46. EPH 19/2/1856 p 1
47. EPN 10/8/1852 p 3, 21/9/1852 p 4, CO 603 23/9/1852, 6/10/1852 - civil engineer to actg govt sec, CO 587 31/10/1852 - naval commander-in-chief to lt gov, enclosure: 30/10/1852 - Gordon's report
48. Lorimer (1971) p 185
49. CO 4935 14/6/1849 p 429 - govt sec to Lloyd, CO 5310 14/6/1849 p 327 - govt sec to PEHB chairman
50. CO 4935 14/6/1849 - govt sec to Lloyd, CO 5310 14/6/1849 - govt sec to PEHB chairman
51. LCA 23 No 7 Minute 23 15/6/1849
52. CO 660 28/12/1855 - admiralty surveyor to naval commander-in-chief, CO 5317 No 4 5/1/1856 - govt sec to PEHB
54. PWD 1/7/88 No 162 5/10/1857 - PE asst eng to govt eng
55. CO 748 No 146 17/6/1859 - PEHB sec to govt sec: enclosure
57. EPH 9/8/1859 p 4
58. CO 748 No 146 17/6/1859 - PEHB sec to govt sec: enclosure
59. CO 744 No 27 7/9/1859 sec naval commander-in-chief to govt sec, CO 747 No 110 10/10/1859 - PEHM to govt sec
60. CO 5323 No 1217 3/9/1859 asst govt sec to PEHB sec, Huisman (1974) pp 11-12
61. CO 2978 No 151 10/11/1859 - PECC to govt sec
62. CO 4407 No 144 14/5/1860 - PEHB sec to govt sec, EPH 15/5/1860 p 4
63. CO 766 12/3/1860 - govt sec to PEHB sec, CO 5323 No 461 31/4/1860 - asst govt sec to PEHB sec
64. EPH 15/5/1860 p 4, Huisman (1974) pp 12-13. The Donkin lighthouse was raised 9 metres to its present height in 1930.
65. G16/1862 p 1 - 1861 PEHB report
66. CO 798 28/1/1862 - admiralty surveyor to govt sec
67. CO 783 No 153 1/7/1861 - PEHB chairman to actg govt sec
68. G43/1863 pp 1-2 - 1862 PEHB report
69. EPH 17/3/1863 p 3
70. G41/1864 p 1 - 1863 PEHB report, EPH 7/6/1864 p 3 - PEHB report
71. EPH 18/7/1865 p 3
72. EPH 29/8/1865 p 2. The time-ball was officially brought into commission on September 1 - G22/1866 p 2 - 1865 PEHB report.
73. EPH 29/8/1865 p 2
74. G22/1866 p 2
75. G14/1867 p 1 - 1866 PEHB report
76. Also called Roman rock.
77. Soonke (undated) pp 48-51
78. CO 363 No 55 8/5/1829 - PE collector of customs to govt sec
79. CO 4899 p 17 1/6/1829 - govt sec to CTPC, CO 365 No 29 4/8/1829 - govt sec to CTPC: enclosures
80. CO 4899 p 115 7/8/1829 - govt sec to PEPC
81. CO 5302 No 152 1/4/1830 - govt sec to Ward
82. CO 4938 9/8/1850 p 484 - govt sec to civil engineer
83. CO 660 28/12/1855 - admiralty surveyor to naval commander-in-chief, CO 5317 No 4 5/1/1856 - govt sec to PEHB
84. PWD 1/784 11/7/1857 - actg asst govt eng to PE asst eng
85. PWD 1/788 No 132 20/7/1857 - PE asst eng to Frames, PWD 1/784 23/7/1857 - Frames to PE asst eng
86. PWD 1/788 No 153 8/9/1857 PE, No 170 23/10/1857 - PE asst eng to govt eng; PWD 1/784 17/10/1857, 23/11/1857 - govt eng to PE asst eng
87. PWD 1/788 No 337 8/1/1859 - PE asst eng to act govt eng, PWD 1/784 17/2/1859 - govt eng to PE asst eng
88. PWD 1/788 No 153 8/9/1857 - Proudfoot to govt eng, 15/3/1859 govt eng to PE asst eng
89. PWD 1/786 13/4/1859, 8/8/1859 - govt eng to PE asst eng, PWD 1/784 17/2/1859 - govt eng to PE asst eng
90. Shark River
91. PEHB reports for relevant years
92. PEHB Coode report (1877) p 3, PEHB reports 1871-75
93. PEHB Coode report (1877) p 3
94. G49/1875 p 4
95. ibid pp 4-6
96. G46/1876 - 1875 PEHB report
97. PEHB Coode report (1877) p 3. Coode's visit and London engineering conferences by 1884 had cost £2982 - G40-1885 p 32. See also C1/1880 pp 30-31: precis of correspondence.
98. PEHB Coode report (1877) p 3
99. G4/1876 p 1 - 1875 PEHB report, G43/1877 p 1 - 1876 PEHB report. Prior to 1855 the PEHB was practically dormant. The earliest letter traced signed by Wormald as secretary is dated 14/9/1855 - CO 664 No 150 14/9/1855 - PEHB sec to govt sec. There are earlier official letters addressed to an unspecified secretary eg 30/6/1855 - CO 5316 No 557 30/6/1855 - govt sec to PEHB sec.
100. PEHB Coode report (1877) p 3
101. 274 metres
102. PEHB Coode report (1877) p 4
103. ibid pp 5-8. See diagram.
104. G25/1879 p 1 - 1878 PEHB report
105. ibid p 1
106. G49/1880 p 3 - 1879 PEHB report. The jetty was initially known as "New Iron Jetty, No. 1" (G49/1880 p 3), then "Jetty A" (G31/1883 p 3 - 1882 PEHB report) and finally "North Jetty" (G36/1886 p 22 - 1885 PEHB report).
107. G48/1881 p 17 - 1880 PEHB report
108. G49/1880 p 1
109. ibid p 2
110. G48/1881 p 17
111. ibid p 17
112. PEHB committee report (1881b) p 1 - statement handed in by Skead
113. G24/1882 p 4-5 - 1881 PEHB report. See also: PEHB conference report (1881a)
114. PEHB committee report (1881b)
115. G24/1882 p 5
116. ibid p 7, G40/1885 p 31 - 1884 PEHB report
117. G31/1883 pp 1 & 6. The "South jetty" was initially known as "Jetty B" as opposed to "Jetty A" which subsequently was called the "North jetty".
118. G31/1883 pp 7-8
119. ibid p 3
120. ibid p 9
121. Coode report (1883) pp 1-3
122. G60/1884 p 17 - 1883 PEHB report. By 1891 the JOHN PATERSOON was costing £1497 more to run than she was earning - G45/1892 p 24: 1891 PEHB report. Thus she was disposed of in May 1892 and "not replaced" - G34/1893 p 6: 1892 PEHB report.
123. G60/1884 p 17 - 1883 PEHB report, G40/1885 p 31 - 1884 PEHB report
124. G40/1885 p 29 & 31 - 1884 PEHB report
126. G42/1891 p 22 - 1890 PEHB report
127. Port Elizabeth - Proposed Out Works - Reports by Resident Engineer and Messrs. Coode, Son & Matthews 17/2/1897 p 2
128. Coode, Son & Matthews report 17/2/1897 (£2,5m-£3m), Brebner report 27/6/1899 (£1m-1,92m), Methven report 30/5/1903 (£1,66m), Commission of Engineers report 28/2/1905 (£3,11m-£3,22m), Methven report 1911 (£2m), Nicholson scheme 1913 (£1,5m)
129. UG25/1923 p 4; SARGH report (1925) p 1
130. Harris (1885) p 9
131. Francis held the dual posts of collector of customs and port captain until the separate post of harbour master was created - RCC XXXII pp 16 & 31 - 14/6/1827 Hay to Francis, 16/6/1827 Francis to Hay; Morse Jones (1971) p 116. Francis continued as head of customs at Port Elizabeth until his retirement in 1853 - BB (1853) p 172.
133. BB civil establishment lists 1835-45. Died 1845.
137. PEBCo, superintendent, Wilson, acting PEHM while Bennet ill until Simpson arrived - EPH 16/1/1855, 3/7/1855 p 3.
139. Captain George Wilson acting harbour master while Simpson absent on sick leave - PWD 1/28 28/8/1862 - PEHM to actg govt eng (last letter signed by Simpson), 8/10/1862 - actg PEHM to actg govt eng (first letter signed by Wilson). There had been complaints about the sickly Simpson's capabilities since November 1861 - PET 21/11/1861 p 2, 28/11/1861 p 3. Wilson replaced him on the harbour board as well - PET 15/11/1862 p 3. Wilson remained acting harbour master until Skead was appointed in 1865 - PE port office correspondence PWD 1/29 (1863), PWD 1/31 (1865) up to 12/6/1865 - PEHM to lighthouse visitor. No PE port office correspondence in PWD 1/30 (1864).
140. BB civil establishment lists 1865-85. PEHM's reports 1880-88.
141. M164 27/3/1846 - PEHM to actg lt gov sec
143. M164 31/10/1846 - PEHM to govt sec, EPH 31/10/1846 p 2
144. EPH 7/11/1846 p 2, 14/11/1846 p 2
145. EPH 23/10/1847 p 3
146. EPH 22/4/1848 p 2, M164 27/2/1847, 23/3/1847, 30/4/1847, 10/5/1847 - PEHM to govt sec, Cooper (1930) p 341
147. EPH 18/9/1847 p 2, M164 4/9/1847 - PEHM to lt gov sec
148. EPH 25/9/1847 p 2
149. M164 6/2/1847 - PEHM to govt sec
150. EPH 25/8/1849 p 4 - Praeconia
151. EPH 9/3/1850 p 4
152. EPH 17/3/1857 p 1, 2/6/1857 p 2 - tenders called and accepted for stone.
153. EPH 26/10/1858 p 1
154. EPH 5/1/1858 p 4
155. EPH 10/12/1858 p 3
156. EPH 17/12/1858 p 2, supp p 1
157. EPH 18/1/1859
159. EPH 6/1/1860 p 3
160. EPH 21/8/1860 p 4
161. EPH 12/7/1861 p 3
163. EPH 20/1/1866 p 2
164. ibid p 2
165. EPH 25/4/1866 p 3 - letter from "An Early Bather"
166. ibid p 3 - editor's note
167. EPH 26/6/1866 p 2
168. EPH 8/6/1866 p 4
169. EPH 12/3/1867 p 3
170. CO 903 16/1/1869 - PEHB sec to govt sec: enclosure 12/1/1869 - Neate to PEHB, see also EPH 19/1/1869 p 2, PET 22/1/1869 p 3
171. CO 903 16/1/1869 - PEHB sec to govt sec
172. CO 5334 No 215 27/2/1869 - govt sec to PEHB sec
173. PET 23/7/1869 p 3
174. Victor (1973) p 298
175. RCC XXVII pp 217-19 - 11/2/1822 Schutte to govt sec, 27/2/1822 govt sec to Schutte
176. RCC XXVII pp 219-20 - 4/4/1823 govt sec to Schutte. Cory dates this as 1824 - Cory vol II p 96
178. Victor (1973) p 302
179. RCC XXVII pp 447 - 6/9/1826 report of the commissioners of inquiry to Bathurst on finance
180. RCC XXVII pp 447
181. Victor (1973) pp 305-06
182. EPH 25/4/1846 p 2 - letter from "A Shareholder"
183. EPH 8/8/1846 p 1
184. EPH 11/4/1865 p 3
185. EPH 19/6/1866 p 2
186. 1829-33: Total Cape exports adjusted to reconcile with later summaries by subtracting PE exports exported via Cape Town - see Notes on Statistics in Appendix 10.

1835-40: Year ended January 5
1841-42: Year ended October 10
1843-54: Year ended January 5
1855-70: Year ended December 31

1857-70: Total Cape exports - Union Yearbook (1917) pp 509-10
188. 1829-59: PE total exports = total exports
1860-70: PE total exports = colonial produce exports

189. No BB data for each port after 1856.
190. 1857-60: A38/1861 No 7
1861-62: Total Cape exports - Union Yearbook (1917) pp 509-10 and Bock (1930) appendix 2.
191. No annual BB data on woolled sheep before 1846 or after 1855. No data for 1850-51 because of the 8th Frontier War (1850-53).
1858-63: Port Elizabeth data - EPH 15/1/1864 supp p 1
1857-60: Customs duties data - GG quarterly summaries
1835-60: Total Cape revenue data - CA (1864) pp 159-60
194. EPH 3/11/1857 p 4, 3/6/1859 p 2, 17/8/1860 p 3, 17/5/1861 p 3, 17/7/1863 supp p 1, 15/7/1864 supp p 1, 7/9/1865 supp p 1, 6/6/1866 supp p 1, 12/7/1867 supp p 1, 14/7/1868 p 2, 30/7/1869 p 4, 15/7/1870 p 4, PET 13/8/1862 p 1
195. PET 13/8/1862 p 1, EPH 7/9/1865 supp p 1, 14/7/1868 p 2
196. 1. If no daily rate was available the following calculations were used based on a six-day week:

   Monthly: (monthly wage)/26.083 days
   Annual: (annual salary)/313 days

2. No local 1846 statistics available so those for 1845 were used. Local wages for 1840 and 1845 are for the Uitenhage district as Port Elizabeth was still part of it during that period. Race is not specified. 1854-7 figures are for the Port Elizabeth district itself. "Colored" figures used for local and Cape averages.
3. No breakdown between servant and labourer available for 1840 and 1845. In 1841 Mfengu labourers were paid 7d a day plus rations on the farm "Cradock Town" near Port Elizabeth - G2J 11/11/1841 p 2.
197. Source for Mfengu beach labourers' wages: GTJ 9/7/1840 p 2; EPH 18/7/1846 p 2, 7/2/1854 p 2, 3/6/1856 p 2, 1/1/58 p 3.
198. G28/1872 p 113
199. G52/1875 p 22
200. G40/1885 pp 31-32

201. Cost of breakwater construction calculated at:
   - 1869-70 - same proportion of total as Mar-Dec 1871
   - 1871-75 - average proportion of Mar-Dec 1871, Jan-Jun 1874 and 1876-84
   - 1876-84 - actual cost known


203. Corporate bodies figure excludes Kowie.

204. G6/1892 p iii
Collector of Customs & Excise: Port Elizabeth

CPE 1/1/1-1/1/6 Letters received 1831-70

Colonial Office:

Letters received:

CO 123-1022 From departments, committees, private individuals, foreign governments, agents and missionaries

CO 2575-2978 From landdrosts, magistrates, civil commissioners, police commissioners and lieutenant governor

CO 3920-4151 Memorials received

CO 4364-4416 Arrears and miscellaneous papers received

Letters despatched:

CO 4843-4852 general

CO 4898-4948 civil

CO 4969-4995 civil - Cape Town

CO 5033-5060 civil - country

CO 5114-5117 naval and military

CO 5302-5352 miscellaneous

CO 5476 Miscellaneous letter book

CO 5718-5732 Schedules of papers submitted to governor

Commissioner of Crown Lands & Public Works:

PWD 1/28-1/31 Letters received from harbour masters

PWD 1/186-1/187 Letters received from harbour officials and harbour works officials

PWD 1/220 Letters received from consulting engineer

PWD 1/334 Papers received: harbours
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PWD 1/784-1/786 Letters received from assistant engineer at Port Elizabeth

PWD 1/788 Letters despatched to assistant engineer at Port Elizabeth

Executive Council:
EC 6-8 Minutebooks

Government House:
GH 23/7 General despatches 1847

House of Assembly:
HA 2-81 Annexures to votes and proceedings

Legislative Council:
LCA 20-23 Appendices to papers laid on table

Lieutenant Governor:
LG 176 Letters received from Port Elizabeth harbour master and shipping reports
LG 531 Memorials received
LG 541-43 Memorials received - ordinary
LG 544 Index to ordinary series

Miscellaneous:
M 164 Port Elizabeth harbour master's letterbook 1831-48

Port Elizabeth Harbour Board:
PEHB 76 Valuation of buildings on land leased from harbour board 1860-65
PEHB 234 Arrival book
PEHB 241 Lease agreements from 1860

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Cory collection

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**Votes and Proceedings of Parliament:**

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<th>1854</th>
<th>Copy of the Minutes of Sir Henry Pottinger on the Administration of the Public Roads of the Colony, which appeared in the Government Gazette of 5th April, 1847</th>
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<td>Correspondence between the Harbour Board of Port Elizabeth and the Government on the Improvement of the Port of Port Elizabeth</td>
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<td>G9-55</td>
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<td>Memorandum by the Chairman of the Central Board of Commissioners of Public Roads, showing the position of the Board at the present time - 1855</td>
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<td>G28-56</td>
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<td>Reports on the Present State and estimated Cost of completing the Construction of the Zuurberg Road</td>
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<td>A8-58</td>
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<td>Petition of the Commissioners for the Municipality of Port Elizabeth</td>
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<td>G43-60</td>
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<td>Report of the Operations of the Divisional Council of Somerset in regard to the Repair and Improvement of the Branch Roads in that Division during 1859</td>
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<tr>
<td>A20-61</td>
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<td>Correspondence relative to the offer of the Crown Steam Mills at Port Elizabeth for Customs purposes</td>
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<td>A38-61</td>
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<td>Returns showing the quantities and value of all articles imported into the Colony of the Cape of Good Hope from 1856 to 1860 chargeable with customs duty under Act 5, 1855, together with the amount of duties levied, &amp;c</td>
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<td>A42-61</td>
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<td>A return of what amount of money has been spent on the so-called breakwater in Algoa Bay</td>
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<td>Return of Total Revenue received from 1830 to 1860</td>
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<td>Special Reports on the Works for the Construction of a Breakwater in Algoa Bay, with a Statement of the Receipts and Expenditure on account thereof</td>
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<td>G1-63</td>
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<td>Report of Mr. Andrews, C.E., on the Works in progress for the Improvements of the Harbour of Algoa Bay</td>
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<td>G43-64</td>
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<td>Communication from the Colonial Railway Engineer to the Chairman of the Harbour Board of Algoa Bay relative to the progress of the Works at that Port</td>
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A4-65  Return of all Vessels arriving in Table and Algoa Bays respectively for the previous Five Years

A74-65  Report of Mr. Heaford, C.E., to the Divisional Council of Port Elizabeth, on the subject of the state and condition of the Rawson Bridge

G6-65  A Return of Amount Expended annually on the Harbour Works at East London from September, 1856 to 1864, inclusive

A5-67  Further Correspondence relative to the Completion of the Algoa Bay Harbour Works

A5-68  Papers referring to the East London, Port Elizabeth, and Kowie Harbour Works

A13-68  Message, with Enclosures, from His Excellency the Governor to the House of Assembly relative to Finances of Algoa Bay Harbour Board

C6-68  A Return of all Vessels arriving at Algoa Bay during the Years 1865, 1866, and 1867

A2-69  Copies of Letters received from Mr. Coode and Mr. Neate relative to the Harbour of Port Elizabeth

G15-70  Report of the Chief Inspector of Public Works for the year 1869

G24-70  Reports by Mr. Coode, C.E., on the Harbours of Port Elizabeth, East London, and Port Alfred, and estimates of the Works recommended by him to be carried out at those Ports

G31-71  Report of the Chief Inspector of Public Works for the year 1870

G28-72  Report of the Chief Inspector of Public Works for the Year 1871

C2-75  Return of Revenue and Expenditure of Table Bay Docks, Port Elizabeth, the Kowie and East London

C4-75  Report of Sir J. Coode upon Port Elizabeth Harbour Works

G49-75  Correspondence between Government and Algoa Bay Harbour board relative to the adjustment of amounts advanced from public works on account of the harbour works at Port Elizabeth
G50-75  Statement showing the Total Amount Expended by way of Advances and otherwise in the Colony and through the Crown Agents, on account of the Port Elizabeth Harbour Works, up to the 31st December, 1874

G52-75  Copies of Correspondence on the subject of the Harbour Works at Port Elizabeth

C5-76   Inspection of Harbours by Sir John Coode

A24-79  Returns showing the Amount of Revenue derived from Guano Islands of the Colony

C18-79  Correspondence on Port Elizabeth Harbour

A38-79  Correspondence relative to the Harbour of Algoa Bay

A57-81  Report by Sir John Hawkshaw, and Mr. Brunlees, C.E., on the Questions submitted to them respecting the proposed Harbour at Port Elizabeth

C6-81   Port Elizabeth Harbour Improvement

G61-84  Accounts shewing the Financial Position of the Principal Harbours of the Colony to the close of the Financial Year 1882-3, or the Calendar Year 1883

C1-89   Harbour Works at Port Elizabeth and East London

G6-92   Results of a Census of the Colony of the Cape of Good Hope as on the Night of Sunday, the 5th April, 1891

A4-94   Papers relating to Port Elizabeth and East London Harbour Boards' Bills

G88-04  Report of the Commission appointed by the Honourable the Treasurer on the 14th June, 1904, to enquire into the Financial Position of the Port Elizabeth Harbour Board and the Present System of Traffic Working


UG13-26 Report of Commission on the Trade Prospects of Port Elizabeth Harbour 1925
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1858
Report of the Select Committee appointed to inquire into the practicability and expediency of constructing a railway or railroads inland, from the harbor of Port Elizabeth

C2-67
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C1-80
Report of the Select Committee appointed by the Legislative Council to consider and report upon plans for the improvement of Port Elizabeth harbour

A25-98
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Report of the Select Committee on the Harbour Boards Bill

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Report of the Select Committee on Harbour Boards

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Report of the Select Committee on the Harbour Boards Loans Bill

A1-05
Report of the Select Committee on Harbour Boards

A32-06
Report of the Select Committee on Harbour Boards Loan Bill

A13-08
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G14-67, G2-68, G30-69, G11-71, G6-72, G36-74

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