

An exhibition on the life of James Henry Pullen

The Life of James Henry Pullen

(1835-1916)



Pullen: Ships of Reality and the Imagination

6 July - 15 December 2012

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PART 1:

The Life of James Henry Pullen and Dr John Langdon Down



Dr John Langdon Down



James Henry Pullen

John Langdon Down was Medical Superintendent of the Royal Earlswood Asylum during the years 1858-1868. These were very productive years and apart from his eponymous syndrome he made one of the largest individual contributions to medicine in the Victorian era. Langdon Down brought an ethical viewpoint to his medical work.



The motto on his family crest was:
"Live and let live".

He supported the admission of women to all the professions – medicine, the law and the church. He supported voting rights for women and in due course the early suffragette meetings of the Association for Universal Suffrage were held at his Harley Street consulting rooms.



John Connolly

He worked with the famous John Connolly, the early psychiatrist whose motto for psychiatric patients was: "Strike off their chains".



The Royal Earlswood Asylum

They jointly examined and photographed the Earlswood residents and tried to classify them in groups according to their appearance. This was how he identified a group with special characteristics, whom he called Mongolian idiots, largely on the basis of their Oriental appearance. He wrote an academic paper "Observations on an Ethnic Classification of Idiots".



The original patient who triggered Dr John Langdon Down's interest.

He did not consider the word idiot derogatory, pointing out that in its original connotation in the Greek language it meant "the lonely one". His original description identified almost every characteristic of the condition. The term Mongolian idiot persisted in the medical literature until 1952 when Ian Munro, the editor of the *Lancet*, responded to the suggestion that the term was derogatory to the eastern races and ruled in favour of calling the condition Down's syndrome. In 1965, with support of the World Health Organisation, the new designation was accepted worldwide. Langdon Down was the first to recognise six other conditions including in particular the disorder later called Prader-Willi syndrome.



The farm at Earlswood

Writing in his third Lettsomian Lecture to the Medical Society of London in 1887 Langdon Down described seven young people in Earlswood who were learning disabled but had remarkable skills in particular areas which could only be defined as marks of genius. There was no easy descriptive term which he could use to define them. Fluent in French, he was the medical pioneer who first called them "idiots savants". They had all come under his care in the Royal Earlswood Asylum.

By far the most notable of these was James Henry Pullen. In adult life he produced a pictorial autobiography setting out what he remembered of his childhood. He had been born in Rye Lane in Dalston near Hackney in 1835. His parents were first cousins. Of their thirteen children, six died early in life and four later in childhood. Infant mortality in general was as high as 15% of all children born at that time but the 70% death rate in the Pullen family was exceptional, suggesting that some unrecognised hereditary factor may have been involved.

The family were quite comfortable, living in a three-storey house with a small walled garden. At the age of eight years he shows the family living room, bright and well curtained, with a fireside rug and with his mother, well-dressed and engaged in needlework, while he plays at making a boat from firewood. His father clearly encouraged him and a boat was launched the following year.

He was a slow developer and because he behaved like a younger child he had still not been put into trousers at the age of 9. Breeching, as it was called, usually took place at the age of seven. His speech was very delayed and he spoke his first word at the age of seven – “muvver”. Behaviour was also a problem and in 1845 he recorded how his father chased after him when he had jumped over the garden wall to play with friends and with boats on the pond nearby.

No school would have him and he was at home with his parents until he was 12 years old. In 1847 he was accepted for admission to Essex Hall in Colchester, one of the three institutions set up by the Rev Andrew Reid to provide special education for those who needed it. Initially built as a railway hotel Essex Hall stood in spacious gardens.

The superintendent was William Millard, the author of *The Idiot and His Helpers*, a handbook on the educational methods in use in Essex Hall. Dr Martin Duncan, the medical superintendent, was at the same time also a geologist of distinction. In this role he had been elected a Fellow of the Royal Society. It was in Essex Hall that Pullen's artistic skill was first identified

Sarah Pearce was the Essex Hall schoolmistress who Pullen remembered staying back after school to sit with him while he practised painting. He also remembered being taken on an outing on the new railway to see the tall naval ships at Walton on the Naze.

Aged 14, he learned to spell his first word – Man. In 1850 all the Essex Hall residents were transferred to the newly built Earlswood Asylum. Pullen reluctantly left behind his treasured collection of the paintings he had done in Essex Hall.

Earlswood was intended to accommodate 400 residents. When Pullen was admitted there were about 150, increasing in 10 years to 300, and in 20 years to 500. Approximately 60% of the residents were charity patients supported financially by the subscribers, who elected them individually for a four-year term. Of the remainder, 30% were fee-paying, about half of whom paid an annual reduced fee of £25 instead of the full £50 needed to meet the annual individual cost to the Asylum. It must be remembered that, at that time, £25 represented the annual income of the average working tradesman so even the reduced fee was substantial in practical terms.

Earlswood had a school which grouped the residents according to their abilities. Mr Wickes took over where Sarah Pearce had left off but to Pullen's distress he still made very little academic progress.

Craft training was available in workshops, in the hope that the residents would train for an occupation which they could take up on their discharge. Christian observance led to the ringing of a bell for morning and evening prayers. One of the first phrases Pullen learnt was “We pray!” Although Pullen could not sing the hymns at Sunday service he recognised the rhythm and he beat time to it.

Things changed the following year when he got his first training in the craft of woodworking. He also quickly learned to make leather boots. By the end of the year he had made a three-masted vessel which he presented to Mr Wickes to thank him for his efforts in the schoolroom. He practised diligently, frequently producing the same model over again until he got it right.



Pullen standing at a workbench

The Management Committee recognised his extraordinary talent and at the age of 20 his status was changed. He was appointed as a carpenter, and given his own workshop. He was given free board and lodging and was paid reduced wages of three shillings per week but with the proviso that he could make and sell small wooden and ivory carvings. His hospital job was to make furniture. Now a member of staff, he became the drummer in the Earlswood staff band which played regularly for the entertainment of the residents. A painting depicts his concept of his new role, imagining himself to be in control of the orchestra through the beat of his drum.



Pullen with the Princess Alexandra

He had ventured into a new area in 1853 when he learned how to shape wood by steaming it to make curved planking. This was recorded by philanthropist Cheyne Brady.



Princess Alexandra

In 1857 he began to work on a mighty man-of-war. This took five years to complete and in the course of its construction he fitted it with 42 brass cannon and 200 working pulleys in the rigging, all made in his own workshop.



It was formally named the Princess Alexandra by way of tribute to the Royal patronage enjoyed at Earlswood. He developed new skills in needlework, shaping and fitting sheets of canvas for sails. Later in life he clearly remembered how hard he had worked. Although he never mastered reading and writing he was numerate and he made a complete list of all the nails and screws and planks he had used on the project. The Princess Alexandra is on permanent exhibition here in the museum.



He went on to work on his model of Brunel's Great Eastern which was to be his greatest project. He carefully assembled all the special tools and materials which he would require and produced a huge working cradle for this 10 foot model. This was an extremely complex operation comprising hundreds of moulded individual planks, with over 1 million wooden pins made in his own specially constructed pin mill. Complete with brass anchors, lifeboats on davits, and copper paddles, the upper deck could be hoisted to show state cabins and furniture. It was exhibited at the Crystal Palace exhibition. Effectively, it was to be his last major work.



Several mystical representations emerged in the shape of boats, the first in 1863 showing a symbolic representation of the universe. In another, four angels guide the boat at its forward end and at the rear an impotent devil; this boat from 1866 is thought to be his version of Queen Victoria's personal transport to paradise.



Pullen's paintings of his model cottages

An international exhibition was held in Paris in 1865. Pullen submitted a model of the West Lodge at Earlswood. Langdon Down requested permission to travel with the exhibit but this was turned down and it went to Paris unaccompanied. It won an award but Earlswood was not represented at the presentation of the prizes.

In May 1868 Pullen fell off the high platform in his workshop and broke his right lower leg. The fracture was set by John Langdon Down. This must have been one of Langdon Down 's last clinical activities in the Earlswood Asylum before his resignation. Unable to carve anything for a whole year Pullen turned to painting again and many of these paintings have survived. It is recorded that his standard of painting was such that Landseer sent him some of his own to copy.



A Victorian corridor and dormitory. Pictures from *All About Earlswood* by Christopher Crayon. London: Earlswood Asylum for Idiots, 1887.

From the age of 40 Pullen turned his back on imaginative creation and devoted his energy to making furniture including beds for Earlswood made in 1875. They feature in this engraving of the dormitory made by his brother in 1887.

Langdon Down Museum of Learning Disability

Pullen died in 1916 at the age of 81. He left a clear history of how he developed his artistic and his craft skills but there is very little in his work to show how he thought and how he felt. A wide range of analyses have been made, with conflicting opinions. First in the field was Tredgold. Writing in his 1915 textbook on mental deficiency he described Pullen as having become famous through the realisation of a childish programme, too emotional and lacking in mental balance to make any headway or even to hold on to the outside world without someone to stage manage him. The root cause however in his view was secondary mental deficiency due to hearing deprivation.

Pullen's autopsy material had been retained and preserved in formalin. F. Sano, a high-ranking Belgian academic, who was a World War 1 refugee in London, re-examined Pullen's brain in 1916. He found that it was badly affected by the changes of old age. In connection with Pullen's speech difficulty he noted that there was less grey matter in the left-side speech area of the brain than in the right. He also referred to the better representation of the occipital lobes where vision is registered. Finally he drew attention to the increased length of an element called the corpus callosum, one of the most constant familial characteristics, noting in particular that his parents were first cousins.

His final conclusion was as follows:

I have never thought it possible to explain by the description of the brain, why Pullen was so tenacious and so industrious ... the foundation of his character was not only to be found in his convolutions.

Sano, F. (1918).

On the other hand Treffert of Wisconsin, working from the published details of Pullen's case suggested a diagnosis of autism. We have to hesitate about accepting this diagnosis. A key feature of autism is the rejection of personal relationships. Pullen remembered with appreciation the kindness of Sarah Pearce and he put on record his similar response to the memory of Mr Wickes. In 1863, when he was 28 years old, he wished to marry a drinking companion. The Management Committee bought him an Admiral's uniform but told him that an Admiral could not marry. He accepted this but was noted by the attendants to have remained distressed for a long time after the event.

James Henry always presented himself well-dressed. He was able to go on holiday on his own. He sold the ornaments he made on a circuit of public houses, starting at the New Inn, moving on to the Greyhound, and then to the Warwick, buying his own drinks as he went along. Only once had he to be assisted back to Earlswood after too much drink and after three months of curfew he resumed his rounds, wearing a green temperance badge and never drank again. He sold his goods for cash and he understood money. Likewise he could read the time on the clock. In practical terms he was competent.



Pullen in an admiral's uniform

A final conclusion on the case of James Henry Pullen may come from a deeper study of the history of his brother William Arthur. The brothers both were slow to talk and then by practice they learned individual words but pronounced them badly. Neither left behind any coherent writings although both could copy very skilfully.

James Henry's autopsy showed no evidence of a familial vascular abnormality which could cause speech difficulties. No materials have survived which could be subjected to chromosomal analysis. Behaviour problems, particularly in James Henry's case, may well have arisen from a difficulty with word recognition and a consequent lack of understanding of contemporary reports on their behaviour. Even at this late stage further information is required before a final diagnosis and explanation can be reached. The most likely conclusion is that in both brothers familial aphasia may have been at the root of their problem. Being locked in to a state of isolation, the normal processes of learning behaviour were denied to them.



A photograph of William Arthur

Having discussed the technical evaluation of microscopic changes in Pullen's brain, Sano concludes that he never thought it possible to explain by the description of the brain why Pullen was so tenacious and so industrious. In Sano's opinion the foundation of his character was not only to be found in the grey matter of his brain. In describing Pullen as seeing himself as the pagan god Woutan, the lord of the universe, Sano was referring to Pullen's inordinate self-esteem. Pullen drew a representation of the universe in the shape of an orchestra controlled by the beat of a drum. It is possible that this portrays an abstract self-image and that as the man who beats the drum he is the man that controls the world. All the contemporary reports make reference to his exaggerated self-esteem.

He referred to himself as ME Clever. His conceit is understandable. Exhibitions of his work were well-attended. He was given elephants' tusks to carve by the royal family. Unable to read and able to understand only the simplest of language he had nobody to counsel him. His work was his life and his determination to protect it is understandable. His famous Giant, which is displayed in the museum, must be viewed in that light.



Pullen's Giant

There is still work to be done. Twenty years ago when I moved from clinical medicine to medical history I was aware there were still books to be read, reports to be reviewed and journals to be checked. The Langdon Down Museum of Learning Disability will provide a focus for all who are interested. If we do not know the history of what has gone before nobody can properly make plans for the future.

PART 2

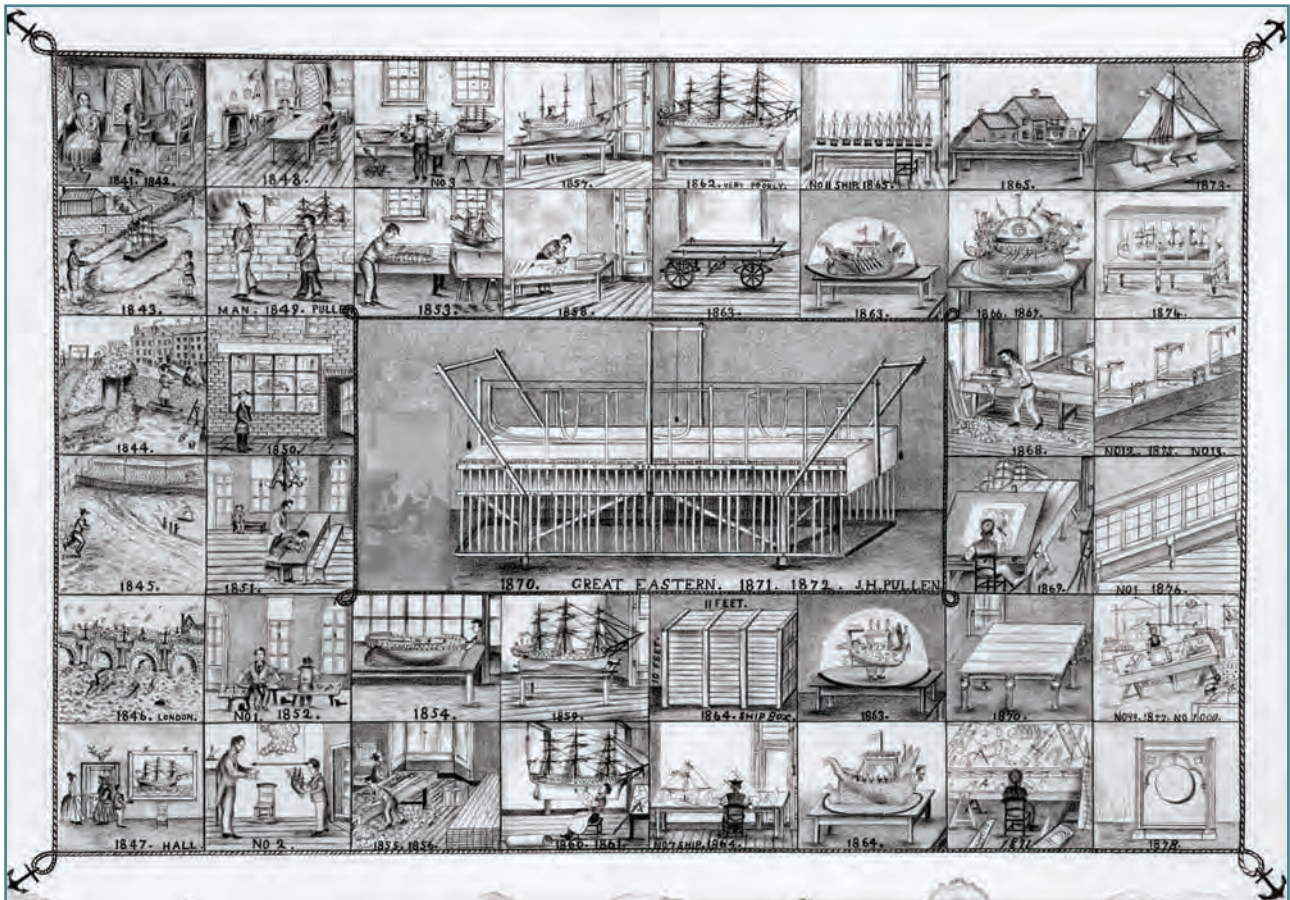
The Early Life of James Henry Pullen (1835-1916)

His pictorial autobiography 1841-1878



James Henry Pullen next to his model of the Great Eastern. This photograph is visible to the left hand side of the large centre panel of his pictorial autobiography.

Known as the Genius of Earlswood, James Henry Pullen was famous for his artistic talent. He never learned to write coherently; however he had a good memory and he recorded the main events from his early life in a series of drawings, displayed in the Langdon Down Museum.



1 1841-2	7 1848	13 No. 3	17 1857	21 1862	28 No. 11 Ship 1865	29 1865	36 1873
2 1843	8 1849	14 1853	18 1858	22 1863	23 1863	30 1866 - 1867	37 1874
3 1844	9 1850	33 1870 1871 1872				31 1868	38 No. 12 No. 13 1875
4 1845	10 1851					32 1869	39 No. 1 1876
5 1846	11 1852 No. 1	15 1854	19 1859	26 1864	24 1863	34 1870	40 No. 99 No. 1000 1877
6 1847	12 No. 2	16 1855 - 1856	20 1860 - 61	27 No. 7 Ship 1864	25 1864	35 1871	41 1878



No. (1) 1841-2.

His earliest memory of home life showed that at an early age he had already developed an interest in boats. He improvised simple models to play with on a pond near his home in Peckham. He shows his mother sitting at the window, disinterested and possibly depressed. She had married her first cousin and six of her 13 children died in infancy. Some of the deaths may have been from genetic causes.



No. (2) 1843.

Two years later he made his first model from a wooden box. His father took him out to sail it on a local pond. This is the only record of parental support and he largely ignored his parents in his pictorial life story.



No. (3) 1844.

He remembers looking over the garden wall at a passer by carrying a boat. He was still "un-breeched" at the age of 9, i.e. not yet in trousers, and he was dressed in skirts like a younger boy. Rejected by the local schools he spent all his time at home.



No. (4) 1845.

Difficult to control at home and subject to violent outbursts of temper, he sometimes got out over the garden wall and he remembered his father chasing after him to bring him back home when he had escaped to play at the water's edge with friends.



No. (5) 1846.

When he was 11 years old he was taken to London for the first time. The bustling traffic did not interest him but he saw real boats sailing under the bridge arches in rough weather and he remembered them. The letter P over the second arch on the left probably identifies his vantage point.



No. (6) 1847.

He was still slow to speak and to learn and no school would take him. He was however considered for Essex Hall in Colchester, an institution set up by the Rev Andrew Reid to cater for learning disability. Pullen simply called it Hall. This was a charity and admission cases were elected by the subscribers. It took two years for him to get the votes he needed for admission. His drawing shows him paying no attention to the Essex Hall staff but fascinated by a painting of a ship on the office wall.



No. (7) 1848.

In Essex Hall he again made poor progress in school but he remembered how his teacher Sarah Pearce came back after school hours to sit with him in the schoolroom on his own and to encourage his interest in drawing. School lessons finished at 1pm and it is 2pm on the schoolroom clock.



No. (8) 1849.

When he was 14 he had learned to write his name and he was proud of this and of being able to spell "man". Escorted, probably by Thomas Pearce, the husband of Sarah Pearce, he travelled on the newly opened branch train line to the harbour at Walton-on-the-Naze. This imprinted on his memory a new vision of tall ships. For the first time he wrote his full surname – PULLEN.



No. (9) 1850.

In 1850 all the children were moved from Essex Hall to the Royal Earlswood Asylum for Idiots in Redhill. He grieved for the collection of his 12 drawings which he had to leave behind.



No. (10) 1851.

Once more he found school work frustrating and he clearly remembered his despair when he was unable to learn anything new from his Earlswood classroom teacher John Wickes, who is seen here consoling him in his distress.



No. (11) 1852. No. 1

Things changed the following year when he was taken into the Earlswood workshop and he got his first training in the craft of woodworking. He had one-to-one tuition and he learned many basic skills very quickly. Here he is making boots.



No. (12) 1852. No. 2.

By the end of the year he had made a three-masted vessel which he felt was good enough to formally present to his old classroom teacher, seen accepting it with appreciation.



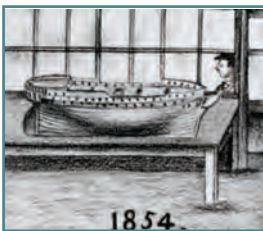
No. (13) 1852. No. 3.

He practised his skills by doing copies of his finished pieces, and he did this frequently throughout his career. This year he made three identical three-masted vessels carved from solid blocks.



No. (14) 1853.

Next year he learned how to mould wood by steaming it and he moved on to fashion boats from individual small curved planks, copying the structure of clinkered boats which he had seen and remembered.



No. (15) 1854.

He made his first large scale model of the planked hull of a boat with miniature curved planking in 1854 but as yet he had not moved on to the design of masts and rigging. This large model is over 6 feet long.



No. (16) 1855-56.

Increasing recognition of his skills led to a change of status. He had been a charity patient for two successive periods of four years. He was now employed as a staff carpenter at a rate of three shillings a week, half the going rate. He was however given his own workroom and allowed to make and sell small wooden and ivory carvings. As a member of staff he ate in the staff dining room and he joined the hospital band where he played the drum. The drum has survived.



No. (17) 1857.

He began work on a mighty man-of-war. This took him over five years. It was fitted with 42 brass cannon and over 200 working pulleys in the ship's rigging. The vessel, when it was completed, was to be named the Princess Alexandra and is a major exhibit in the museum.



No. (18) 1858.

For the ship's sails he needed new skills in needlework. His drawing shows how he shaped and fitted sheets of canvas and developed a classical system of rigging, all remembered from a picture he had seen on a handkerchief.



No. (19) 1859.

The ship was built in two stages. The upper deck was completed first and it is shown here ready for fitting.



No. (20) 1860-61.

The enormity of the task to be completed is illustrated by the working position which he had to adopt over a period of two years, leaning backwards on a stool below the huge hull of the vessel. Every nail and screw, every plank, every cannon and every sail was made by Pullen himself and he listed all the components. He was able to count although he was scarcely able to write.



No. (21) 1862.

The ship is fully assembled, with both the upper and lower decks completed and aligned together. His brother William had also been admitted to the Royal Earlswood Asylum. James Henry regarded him with affection but he did not portray him as an assistant. William's main work location was the print shop, where he displayed great talent.



No. (22) 1863.

Shifting the large craft must have been a problem and Pullen made this sprung wheeled trolley to move it. The work completed, it was named the Princess Alexandra. Earlswood enjoyed Royal patronage and the Asylum had been opened by Prince Albert.



No. (23) 1863.

A major work completed, he turned his attention to less serious matters and produced his first depiction of the universe in the shape of a ten-oared boat finished off with a bearded figure on the prow, possibly depicting the Almighty, with snake like creatures at the stern. He was noted for following the religious observances in Earlswood and when the morning and evening bell rang for prayers he used to call out: "We pray". In his imagination, he was afraid that snake-like evil influences would take control.



No. (24) 1863.

A second smaller six-oared boat reflects an oriental influence probably picked up from a picture he had seen. He had a pictorial memory.



No. (25) 1864.

His concern about safe navigation is still reflected in a much larger version of his dream boat, also exhibited in the museum. He is still preoccupied with the evil influence, represented by the snake at the stern of the boat. He continued to work on the concept of a large vessel, this time with a bigger cabin but illustrated at the early stage of development with its empty rowlocks and no oars.



No. (26) 1864. Ship box.

He made this large wooden container, 11 feet x 10 feet for transporting exhibits as required.



No. (27). 1864. No. 7 ship.

He began work on completing a fleet of vessels, the first two illustrated here. He had a mental picture of Russian aggression and had done a painting of the battle of Sebastopol. His warships were intended to be a contribution to an imaginary Allied fleet.



No. (28) 1865. No. 11 ship.

The fleet of 11 ships, laid out symmetrically in line, is shown assembled for review. Believing himself to have been made an admiral in the Royal Navy in 1863, he was showing his concern for national security.



No. (29) 1865.

This is a picture of a model of an Earlswood cottage which was sent to the World Exhibition in Paris, and awarded a bronze medal. Dr Langdon Down wished to attend, but was not allowed by the Board, and the exhibits were handled by an agent and went to Paris unaccompanied.



No. (30) 1866-1867.

Returning to the question of transport to paradise, he made special provision for the Queen. This is a six-foot model of the vessel in which he imagined Queen Victoria would travel to Paradise when her time came. It is a barge drawn forward by four winged angels, assisted by the oarsmen. A figure at the rear probably represents the devil with a forked tongue, vanquished and now under angelic discipline. The snakes are gone. The model is now on exhibition and shows a well-equipped Royal apartment.



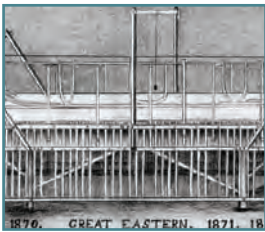
No. (31) 1868.

Employed on half wages Pullen made furniture for the Asylum. Meeting the demand for furniture for Earlswood was a major task and he is seen cleaning large pieces of wood for this purpose. He made hundreds of pieces of furniture, many of which featured in later accounts of Earlswood.



No. (32) 1869.

Falling from a high working platform in a fit of temper, he fractured his right leg. The bone was set by Dr Langdon Down but for some months he was unable to work in the workshop and occupied himself painting. The two figures he has painted here have not been identified and neither resembles the photograph of his brother William taken by Dr Langdon Down in 1865, nor the completed portrait of William.



No. (33) 1870, 1871, 1872.

He produced a huge working cradle on which he laboured on the vessel for four years, leading ultimately to a formal public launching in the summer of 1872. Although he could not read or write he understood numbers and he kept a detailed record of the total count of every type of component, down to the 5585 rivets he had cut in the special mill he had made.



No. (34) 1870.

Looking ahead to the future and to the formal exhibition of his huge model of Brunel's Great Eastern he prepared a table which would be the base for a protective glass case which he was now planning and did not complete until later.



No. (35) 1871.

He sits down in his workshop to think again about what he still needs for the creation of his greatest work of all – his model of Brunel's Great Eastern, a transatlantic liner.



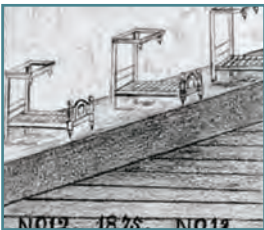
No. (36) 1873.

He still finds time to build an impressive model yacht.



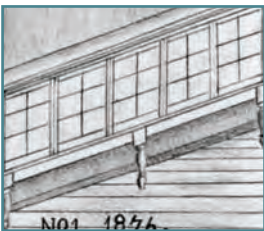
No. (37) 1874.

Pullen began the Great Eastern in 1870. It was to be his biggest craft project representing a huge challenge because it was so big and so complex. Brunel's transatlantic powered sailing vessel could carry 500 passengers and 8000 tons of cargo. Pullen planned ahead, assembled a large collection of special tools and devised a 10 foot model, based on a drawing he had seen. A skilled glazier, he made a substantial glass case for the protection of the model.



No. (38). 1875. No.s 12, 13.

A master craftsman, he set about making new beds for the Asylum. He made at least 13 in one year. Working for the Asylum he designed and made large quantities of sturdy furniture. These are some of the beds he constructed. Many survived for fifty years or more. This later drawing shows the no 12 bed needed for a girls' dormitory. He had already finished the first bed no 13 for the next dormitory.



No. (39) 1876.

He set about constructing protective barriers along the walls of the Earlswood corridors. This was the first.



No. (40) 1877.

He returned to the drawing board, putting aside his tools. In reflective mood he is busy with the picture he assembled for his pictorial autobiography. He first labels the picture No. 99 and then on second thoughts No.1000, probably a mistake for No.100. The picture suggests that the life story as we have it is made up of a selected 41 images out of 100 available.



No. (41) 1878.

This big gong was the last thing he made and was used to assemble the residents for meals, for entertainment and for morning and evening prayers. He was to live on until 1916 but the great surge of artistic activity was over and he devoted himself in the main to producing small carvings of wood and ivory for sale. These were considered to be of lesser quality than his earlier work.

Conor Ward, FRCP, PhD, is Professor Emeritus at University College, Dublin.

He is a Patron of the Langdon Down Museum. Following a career in paediatric cardiology Professor Ward specialised in medical history. His special interest in Down's Syndrome originated in a responsibility for the clinical care of Down's syndrome children with congenital heart disease. He was awarded a PhD in medical history in 1999.

He is the author of the book *Dr John Langdon Down and Normansfield*, two other medical history books, and has published over 30 medical history articles.

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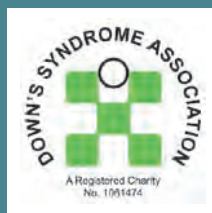
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Langdon Down Museum of Learning Disability

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