

The Observatory and Telescope

An observatory has been located in the grounds of Newnham College since 1891 when a fine telescope was donated by Mary Boreham, daughter-in-law of the astronomer William Wakeling Boreham. There is nothing in the College archives to explain why Mrs Boreham took an interest in Newnham, though her letters to the College about the telescope have a friendly tone.

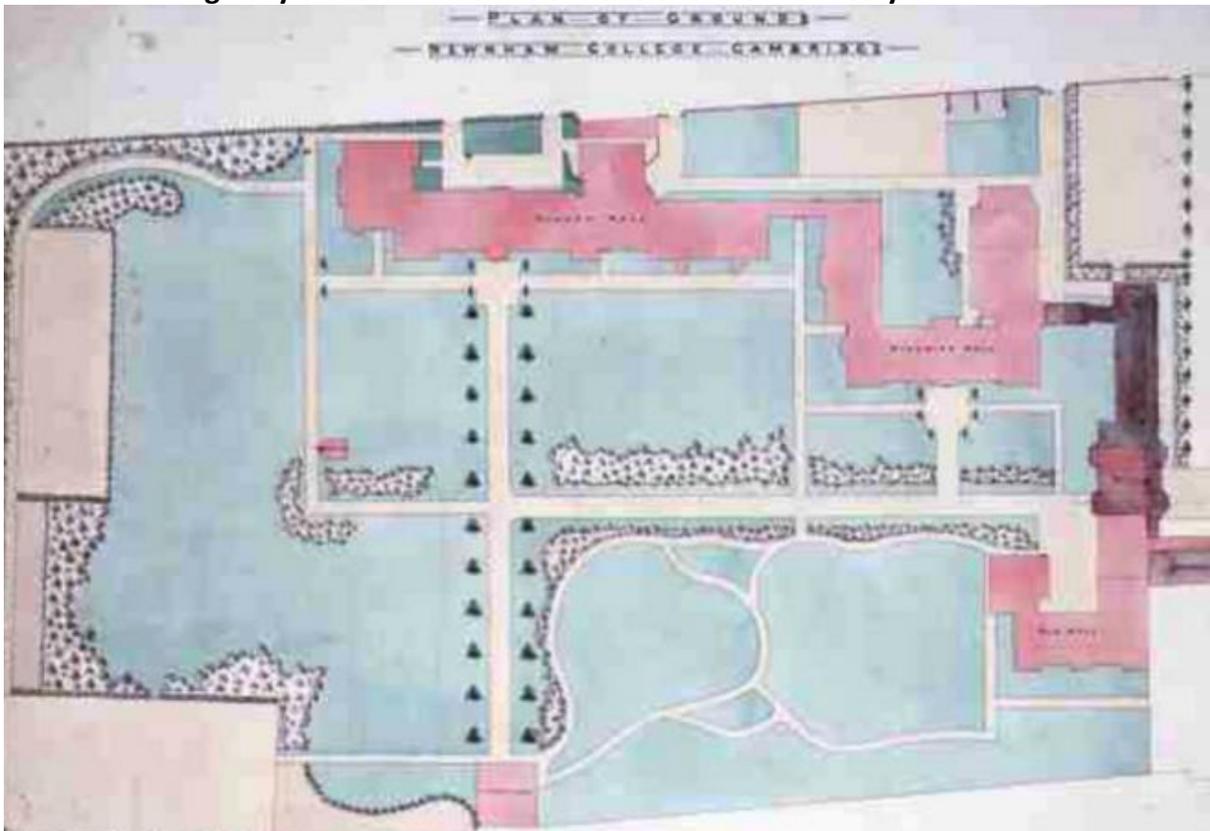
An article in the 1991 Newnham Roll Letter written by Peggy Stanier states:

Astronomical interests have been cultivated at Newnham in non-mathematical students since the valuable gift of a telescope and a small observatory. It was at first placed on a mound to the south of Clough Hall, but when the view from it was obstructed by the building of Peile Hall (1911) it was removed to an open space at the far end of the College Grounds. It was placed under the curatorship of a Mathematical Scholar - at this time Astronomy was considered a branch of Mathematics.

In 1892, the Chair of the Garden Committee, Blanche Athena Clough, decided to start planning the College gardens. The College engaged James Backhouse & Son of York to draw up a plan for the gardens (shown below). At this time, Newnham Walk still ran through the College past Sidgwick hall to Grange Road, although the College was negotiating with the City to have it closed as a right of way, and replaced by a new road to the north of the College. The new road, Sidgwick Avenue, was built and in 1894 the College site was unified.

The layout of the main paths was adopted and remains to this day. The meandering walks at the bottom of the plan were designed for strolling. North Hall (now Old Hall), South Hall (now Sidgwick) and College Hall (now Clough Hall) are shown in pink. Also in pink are shown the Chemistry Laboratories (at the bottom of the plan) **and the Observatory (in the centre of the large lawn on the left).**

The gardens continue to evolve as different parts of the College are developed. **For example, the Mound was originally created in 1891 as the site of the observatory.**

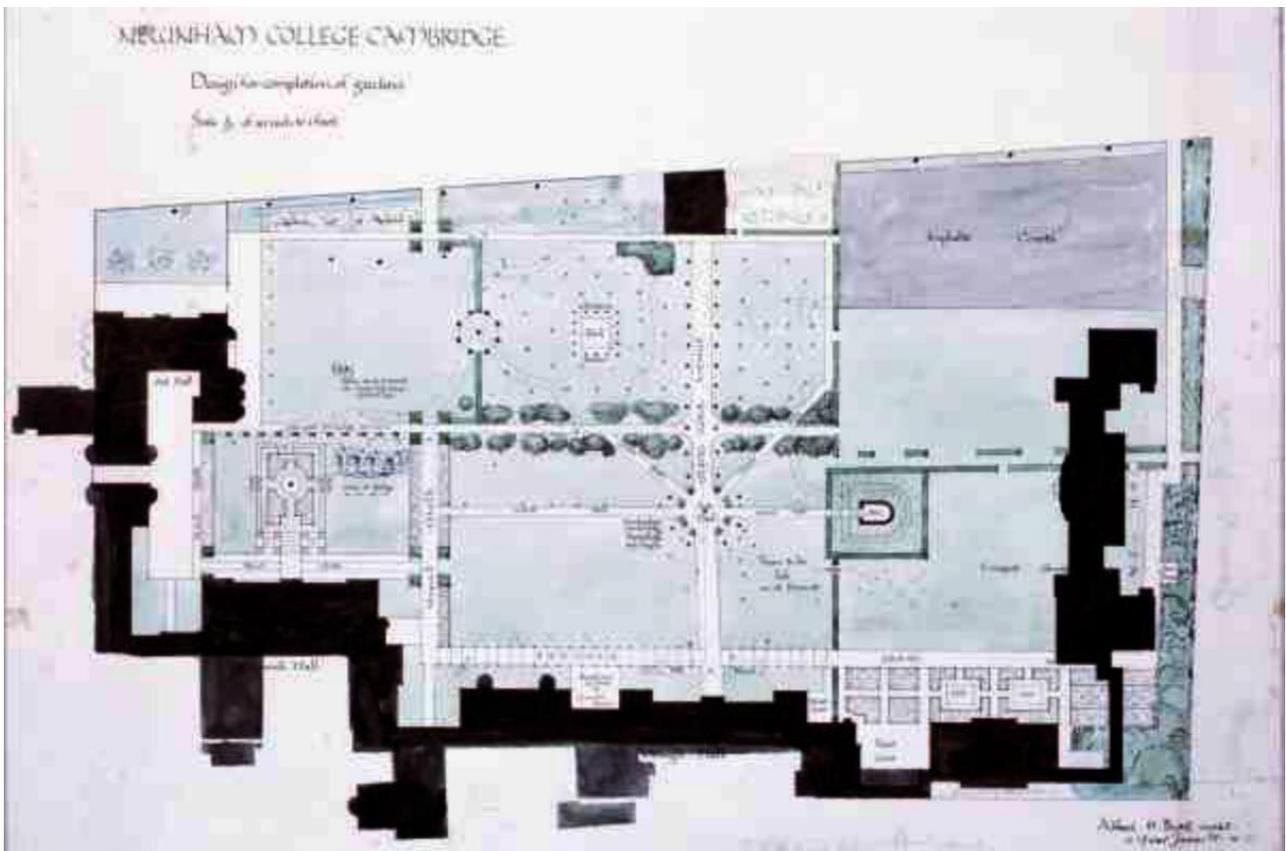


The Backhouse plan (James Backhouse & Son of York, 1892)



View of the Observatory from Peile Hall

The Observatory and mound were formally incorporated into the garden design shown below:



Plan of the garden redesign by Alfred H Powell, 1906

The new Observatory was built with “a curved western end and a rectangular eastern end of charming design and with a pleasing doorway”. The uses of both these instruments are described in a detailed set of instructions dated September 1914 (sadly the author is unknown, but a copy of these instructions can be found in the College Library).

The observatory was moved to its present position on the playing field when Peile was built and blocked the view of the heavens. A memorial to the Principalship of Mrs Sidgwick was erected on the mound in 1914.

The planting of the mound was redesigned in 2009 when a knot garden was created. During this project, the foundations showing the base of the Observatory were discovered.



Photo from Tony Arnold who was the Head Gardener during the Mound refurbishment project in 2009 to 2010

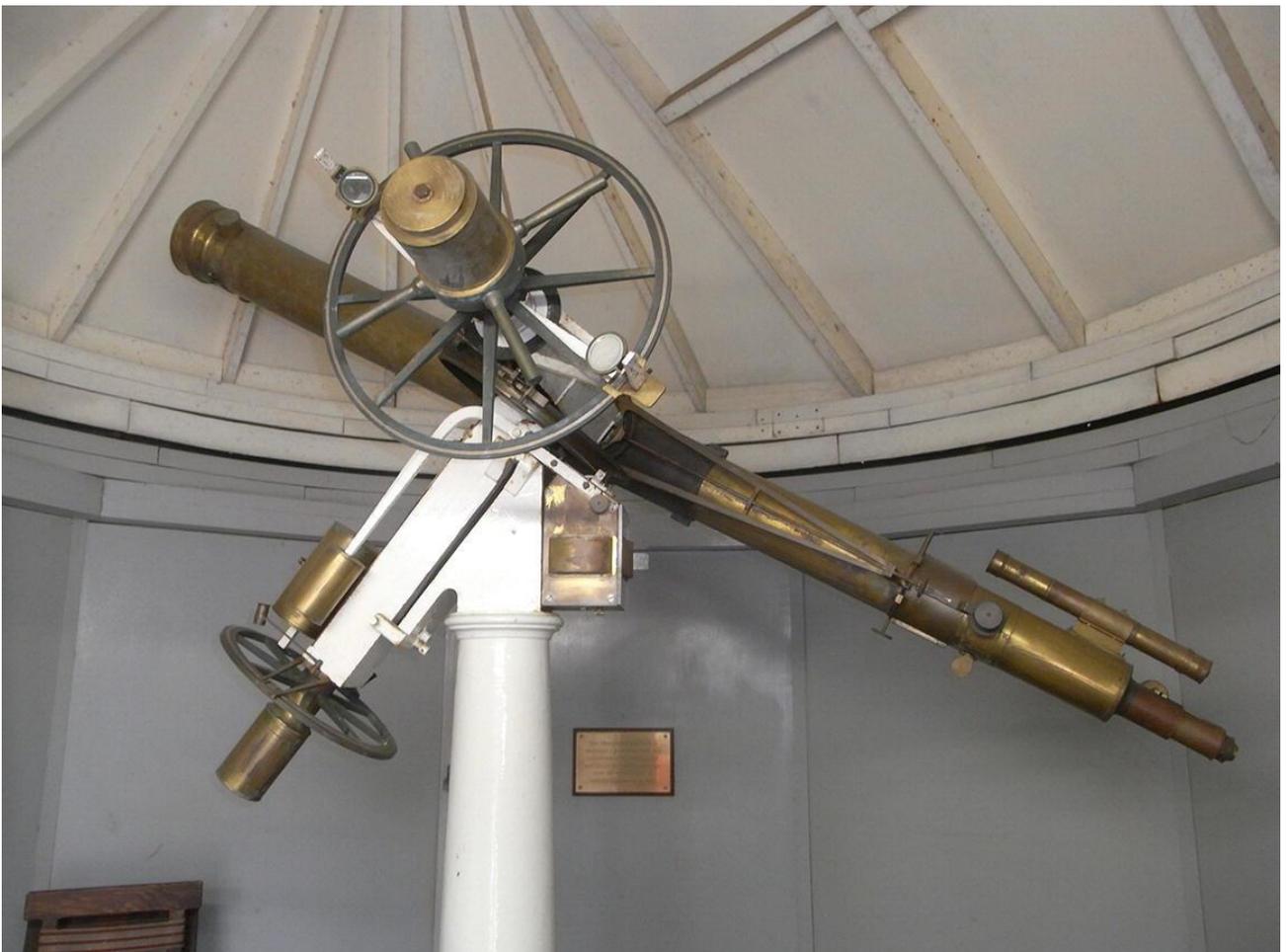
At about the same time that the telescope was moved the College acquired a second piece of astronomical equipment, the Transit Instrument.

An excerpt from an article written by MW (Peggy) Stanier in the 1991 Newnham Roll Letter recalls that on one occasion in early autumn 1985 when Halley's Comet became visible, undergraduates and Cambridge Astronomical Association members mingled happily for an early evening viewing session, with all available optical instruments at the ready. “Those who caught a glimpse of this very dim and unimpressive object felt themselves very fortunate indeed”.

In 2013 when the Iris Collection was developed iris borders planted around the Observatory were created.



The Observatory in its current location, prior to the creation of the Iris garden and a photograph of the old telephone (all the lenses have been removed and so this no longer works).



Newnham Telescope and Observatory: some historical notes covering about the last 30 years.

The observatory (but not the telescope) was renovated as a training project for The Royal Engineers in the days when Michael Payne was Bursar and Peggy Stanier was a Fellow and amateur astronomer who took a special interest in the telescope. When the project was finished there was a special opening ceremony.

Records of this, and some earlier history, are in the Archives under the care of Anne Thompson, who holds a file relating to the telescope and observatory.

Since Peggy's death (and some time before that) no-one has had overall responsibility for the telescope and observatory, though various people have "done their bit" to try and ensure its survival in College. Here are some of the people involved. There may be others.

An ad hoc committee consisting of Rachel Padman, Liba Taub and Ann Mullinger met occasionally over the years after Peggy's death to consider the future of the telescope and observatory, both of which had clearly been neglected and were in a bad state of repair and unusable. Various components had "fallen off" the telescope and were lying around on the floor, the telescope tracking mechanism did not work (essential for keeping the object in sight with an instrument of such high magnification). The mechanism for rotating the observatory roof (so that the slit was located appropriately for viewing the region of the sky of interest) was unusable except by those with more physical strength than most members of Newnham. Various sections of the wooden structure of the observatory were rotten, and the building leaked water in places.

The group reported this to the College Council and some emergency repairs were made to the building. In addition a small sum of money was granted to pay for a retired instrument maker

from the University Zoology Department, Richard Holder, to carry out essential repairs on the telescope and to get the tracking mechanism working again. By this stage Ian du Quesnay was Bursar.

It became clear that the telescope was not usable on a routine basis and the ad hoc group recommended that students should no longer be allowed to borrow the key from the Porters' Lodge. [Peggy Stanier used to train students who were interested in the telescope and their names were on a list of those allowed to borrow the key from the Porters' Lodge.] The possibility of College buying a small, portable telescope was raised but no decision was made.

General advice is that the telescope is really unsuitable for casual use, since it is inappropriately complicated. Also, conditions in Newnham garden are not all that good for astronomical observation. The observatory is apparently of greater general historical interest than the telescope itself and well worth preserving. Both the telescope and the observatory are also part of Newnham's scientific heritage.

Various "attachments" for use with the telescope were found in boxes in the observatory. An inventory of these was prepared by Jane Brown and Ann Mullinger, Jane having joined the ad hoc group when she returned to live in Cambridge. The list was sent to the College Secretary for safe keeping.

The ad hoc group wrote various reports (also sent to the College Secretary), including various suggestions as to what might be done with the telescope and observatory in the longer term; these included ideas both for keeping the telescope and observatory together in the current location or elsewhere in College, and also suggestions for display of the telescope separately, inside a College building. Some of these ideas were given brief consideration by the College Council and the Valuable Possessions Committee (and possibly also the Governing Body). However,

nothing was decided and the ad hoc group was not empowered to carry matters forward and so eventually gave up meeting, though the members have not lost interest in either the observatory or the telescope.

Copies of the reports from the ad hoc group should be available in the records of the Committees mentioned above and/or other records held in the office of the College Secretary.

College Committees taking some interest in the Observatory and Telescope have included : the College Council, the Governing Body and the Valuable Possessions Committee. The Garden Committee can now (May 2016) be added to the list because Jenny Morton, the current Chair, recently arranged for the removal of the boxes of “attachments” from the observatory to somewhere in College. She has also arranged for the inside of the observatory to be cleaned prior to an open day at which visitors will be allowed to look inside the observatory, under supervision, in addition to viewing the flowering iris.

There is clearly a need for some joined up thinking about the telescope and observatory and for decisions to be made about the location and maintenance of both.

AMM

1 May 2016

Copy to:

Principal, Vice Principal, Bursar, Liba Taub, Wendy Evans, Anne Thompson, Rachel Padman, Jane Brown, Lucy Adrian, Jenny Mander, Jenny Morton, Holly Adams.