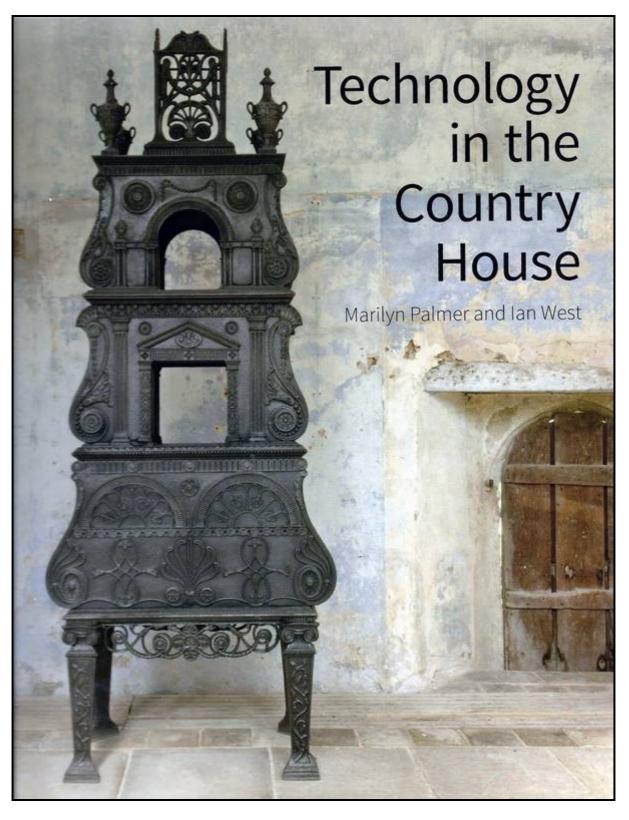
#### A REVIEW AND A SUMMARY OF THE BOOK BY THE CIBSE HERITAGE GROUP



A Publication by Historic England & the National Trust (September 2016)

#### THE REVIEW

#### Technology in the Country House

Having read the book titled *Technology in the Country House* I found it an enjoyable and informative journey back in time.

Technology in the Country House is a chronicle through the creation of the built environment, when the Aristocracy and Landed Gentry moved from living in cold draughty residences with minimal facilities into a new era of comfort.

No longer was there a need to move to the Mediterranean during the winter months. The Mediterranean climate could now be brought into your home.

The book takes us on a tour of how these new technologies emerged and slowly became the norm that we all take for granted today.

We read how the new aristocracy, the industrialists and entrepreneurs quickly embraced these new engineering technologies for their own country houses.

The country houses together with their estates were the forerunner for creating the built environment. They are the embodiment of what brought together all the diverse engineering disciplines that made dwellings places where people could live together in healthy, secure and comfortable surroundings.

The book describes how the estate buildings Physic, Orangeries, Pinery-vineries, hothouses were heated and ventilated before their enhanced environment was copied and moved inside the Stately Mansion for the benefit of the occupants.

The book is a remarkable tour de force, a must for anyone who has an interest in reading how during the 18<sup>th</sup> & 19<sup>th</sup> centuries these Country Houses and their Estates with their occupants contributed to the formation of the building services industry.

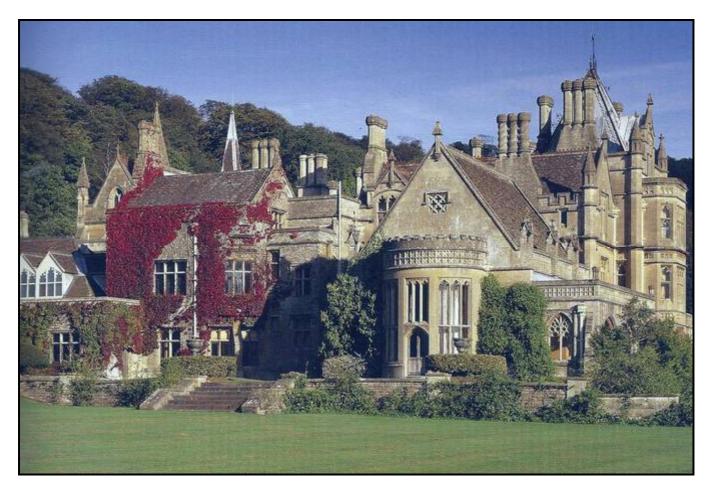
FJF, 9/2016

#### A PICTORIAL SUMMARY

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# Introduction: the background to technological change in country houses

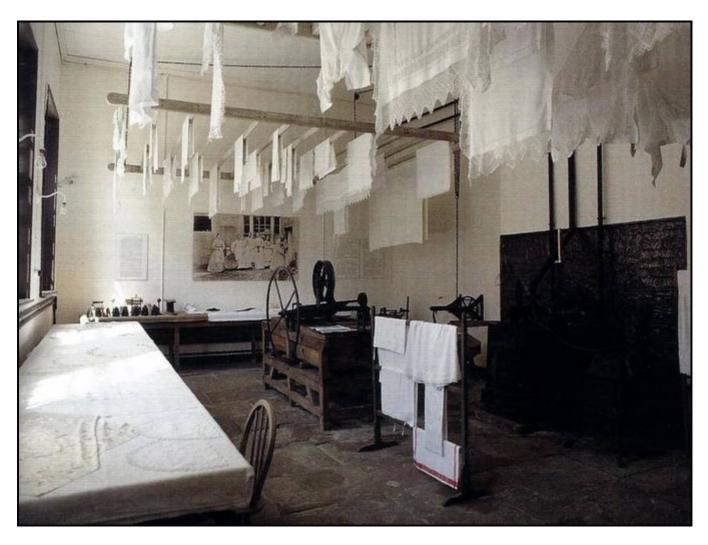


Tyntesfield, rebuilt 1862-4 for William Gibbs, who travelled frequently from the nearby port of Bristol in connection with his business of importing guano from South America.

#### Beyond the house: technological innovation in estate buildings, parks and gardens

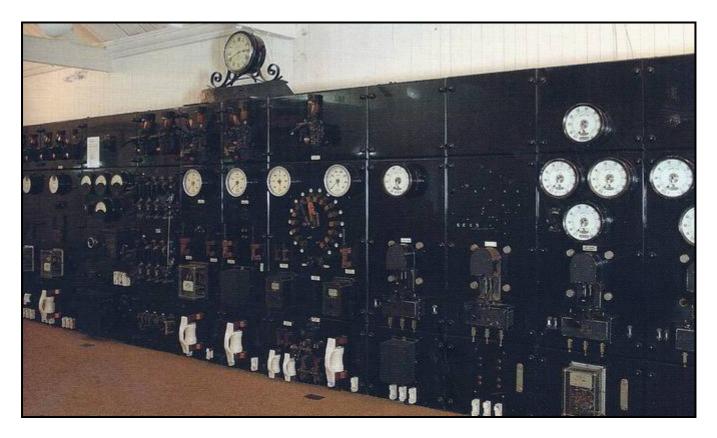


The cast-iron waterwheel, built by Bramah & Sons in the 1830s to replace the original horse-driven wheel which pumped water from the River Mole to the lakes at Painshill Park: (Photograph of 1899).



The double-height dry laundry, Beningbrough Hall, with drying racks, a box mangle, ironing table and a stove for heating flat irons.

#### Lighting and energy production



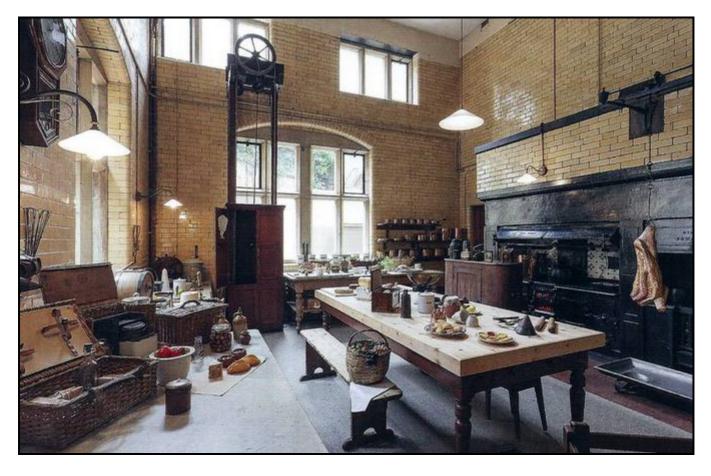
The control panel for the incoming AC mains supply and for the plant that converted it to DC in the Power House, Waddesdon Manor

### 5 Heating and ventilation



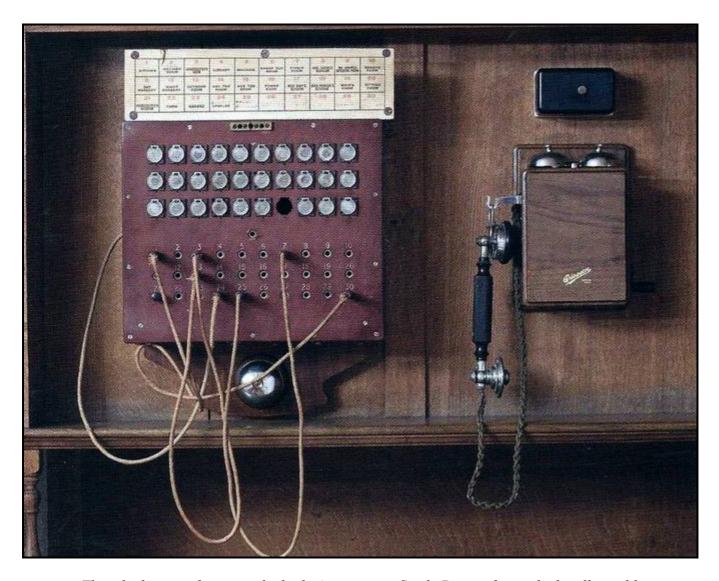
The basement at Worsley New Hall housed the hot water boiler, with heat exchanger coils in the chambers either side.

### Food preparation and storage



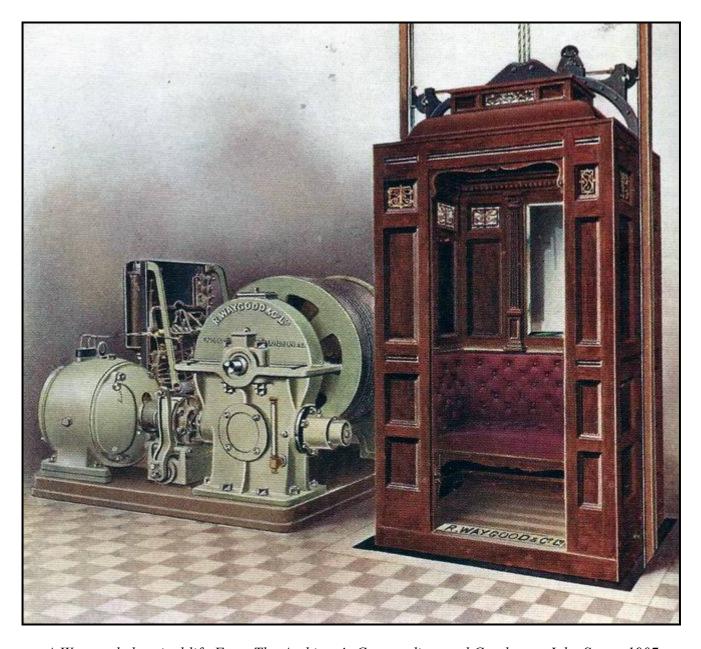
The kitchen at Cragside with a high ceiling and windows for ventilation. The dumb waiter connects the kitchen with the scullery below.

# Communications: bell and telephones



The telephone exchange in the butler's pantry at Castle Drogo, from which calls could be directed to and from the telephones within the house.

## **8 Transportation**



A Waygood electrical lift. From The Architect's Compendium and Catalogue, John Sears, 1907

### 9 Security



Leather fire buckets in the servants' hall, Chirk Castle.

## 10 Conclusion



The modern hydroelectric plant at Chatsworth, with the original 1893 equipment in the background.