

That was the year that was

(A light hearted review of the Associations Journals 1957-1991)

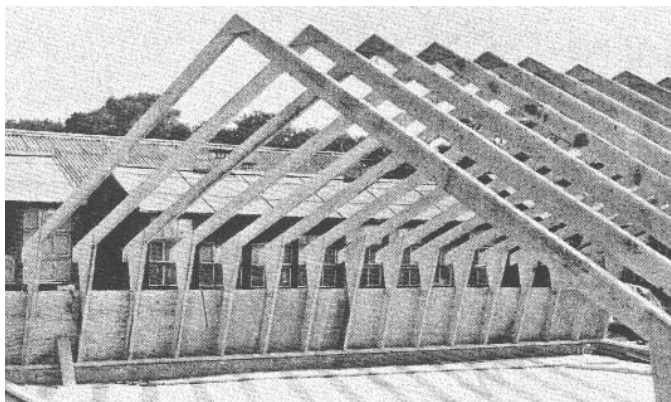
By John Messer

In the last Journal, in the article on timber buildings, mention was made of an experimental broiler house built at the Cambridge School of Veterinary Science. Dr. David Sainsbury, one of the founders of the Association, Membership Number 18, writes "In your recent article you make reference to the building put up at the Veterinary School designed by the Plywood Manufacturers Association of British Columbia (whatever happened to them).

It really was a splendid little building and we used it until I retired from the School 35 years later. It was still in perfect working order when it was bull-dozed with all our other farm buildings to make way for a huge development financed by Bill Gates Microsoft Foundation working on computer development. That is the way of the world now. Poor agriculture but its day will come again.

What a splendid journal "Countryside Building" is and Tony Hutchinson is to be congratulated on a really splendid job".

A photograph and description of the building is shown here.

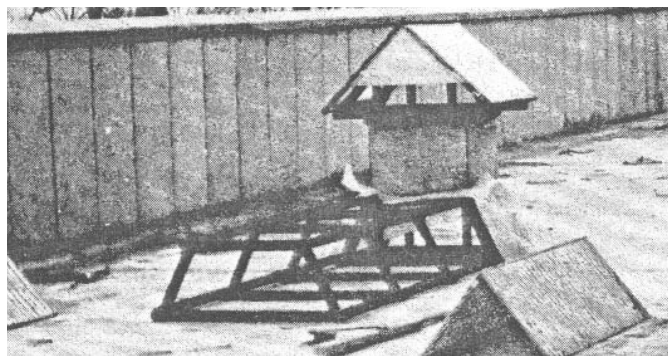


The Broiler house. Rigid frames of CCS Western Hemlock with Canadian Fir plywood gussetts, exterior grade plywood on walls and roof. No additional bracing

To return to a review of these early Journals.

Potatoes are the Cinderella of the articles in this set of Journals, for they appear in only two reports, possibly because the basic research into the storage of potatoes by Burton and Mann at East Malling Research Station provided much of the data needed by building designers. In those days most potatoes were sold as ware and there was little demand from potato processors for storing potatoes at a specified temperature or humidity in the farm store.

In 1968 those attending the Association Spring Conference based at Churchill College Cambridge visited two farm with very different stores. At A.H.Worth Farms near Spalding, described as a "delightful efficient farm" and after an excellent lunch in a "magnificent workshop" the Association Members were introduced to a "Dicky Pie". This was not a pudding but a potato store. It was an adaptation of the age old potato clamp in which potatoes were stored in the field in long clamps and protected from frost by a covering of straw and soil. The heat generated by the potatoes escaped through spaced vertical chimneys. At the Worth Farms the field clamp was replaced in the farmstead by two 120 ft. long insulated walls, 5 ft. high and spaced about 15 ft. apart. The potatoes were stored between the walls and



The "Dickie Pie" Potato Store A.H.Worth

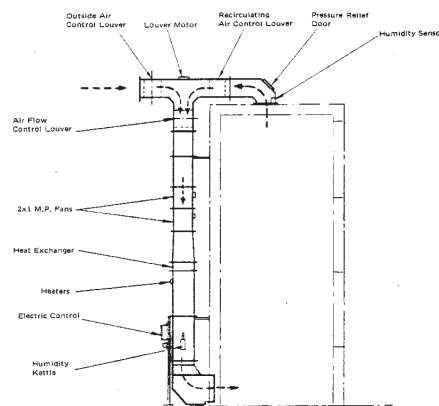
covered with polythene sheeting. However no mention is made of any insulation to protect the potatoes from frost which would have been essential. The ducting and chimneys to removed the heat of respiration of the potatoes are shown in the photograph.

In contrast to this simple store, at the 3200 acre Coldam Estate near March, owned by the Co-operative Wholesale Society, £6200 had been spent on new buildings where all the buildings were designed to be multi purpose. The Conference report mentions two buildings each 90 x 35 x 18ft. to eaves, and each costing £10466, (very accurate accounting!). Each year they were filled with corn and after it had been dried and sold, each building was filled with 1000 tons of potatoes. After the potatoes were sold the buildings housed barley beef. The design of the building is not given but they probably had clear span steel or concrete frames and they would have had some system for conditioning the crops.

In the late 1960s and early 1970s potato processors began to ask farmers to store potatoes at the specific temperature and humidity essential for processing potatoes into, say, Crisps or French Fries, to avoid the product becoming discoloured or spoilt in some way. Although the environment to prevent spoilage had been researched and was largely known, ways of achieving it in farm stores was not, and there was a demand for research into the hardware and controls used in these stores.

Oliver Statham of the Potato Marketing Board described a set of 12 storage bins built at the Boards experimental station at Sutton Bridge. Each bin was 2.45 x 2.25 x 3 m high. They were made from composite panels formed from two skins of 16mm Canadian Douglas Fir Plywood fixed to 75 x 175mm Kuring hard wood stringers spaced at 280mm centres. The space between them was filled with Styrofoam. As the plan shows the ventilation system was designed to give almost any combination of airflow and humidity that the experiments require, as well as air blending and recirculation.

To the regret of Journal readers the results of the work at Sutton Bridge bins was published by the P.M.B. and do not appear in this set of Journals.



The Environmental control system of the P.M.B. experimental stores