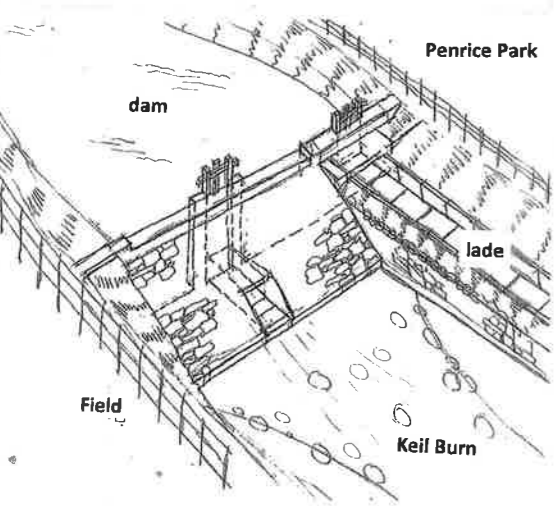


Dam/weir

This was built of finely dressed ashlar blocks on the water side with a 45 degree rubble built revetment to the front. An emptying sluice was located in the centre of the dam (approx. 1m wide x 1m high) to allow for emptying & dam cleaning, the roof of the sluice tunnel through the structure being of thick stone slabs & the sides of dressed stone. At some point in the past the section of dam between the lade sluice and the edge of the dam sluice was totally removed presumably to allow fish to access the upstream side and to avoid the narrow dam sluice from choking & causing flooding in times of spate. The sluice to the lade (approx. 1m x 1m) was historically rebuilt with signs of concrete works added to the sides and a stone slab top. In the 1980's the iron toothed rack & sluice lifting gear/guide system was found by myself buried at the base of the opening to the lade.



Lade

The route of the lade can still be traced as it was left as a "nature strip" when Penrice Park was begun in 1996. For the first 50-60 metres from the dam/weir the lade was both floored and lined on each side with Caithness stone slabs as due to the location tight to the burn there was little room for an embankment to support/ seal it. The remainder being lined in dry stone built walling.

Drying Kiln

The normal purpose for kiln drying was to facilitate the milling of corn, which owing to bad harvest weather, has been brought in damp from the fields. The drying of the corn greatly facilitated the milling process, as the crop when dry became brittle and the chaff was more easily removed. Damp grain would also become lodged between the stones during grinding resulting in a pasty mess. Lowering the moisture content of the grain made it less vulnerable to mould & fungus and prepared it for storage over the winter months, the heat involved in the drying process also had the benefit of fumigating the crop of pests. Drying kilns were also used for killing off the shoots of germinating grain. The seed after threshing would be spread evenly on the drying room floor or "kiln head" which was made of finely woven wire or perforated steel plates, both supported on an iron frame. Early kiln drying floors were made of perforated terracotta tiles. A wooden shovel to avoid the risk of sparks would be used to regularly turn the crop in order to ensure all the seed was dried evenly. The miller through his experience would know when the moisture content was lowered to an acceptable level, this may take several hours depending on the condition of the grain when first laid on the floor. When happy the grain would then be bagged for taking into the mill and tipped in to the hopper above the millstones or stored for later use. Approximately 5-6 feet (1.5-1.8m) below the kiln head was the top of the kiln fire, placed centrally and with 4 brick arches radiating from it to the underside of the kiln head. Fuel for the firebox could range from local coal & coke, timber or the waste chaff from the milling process. The risk of fire spread from the kiln fire to the rest of the mill complex was always a great risk, in many cases the kiln was in a separate building. Lundin Mill kiln was part of the

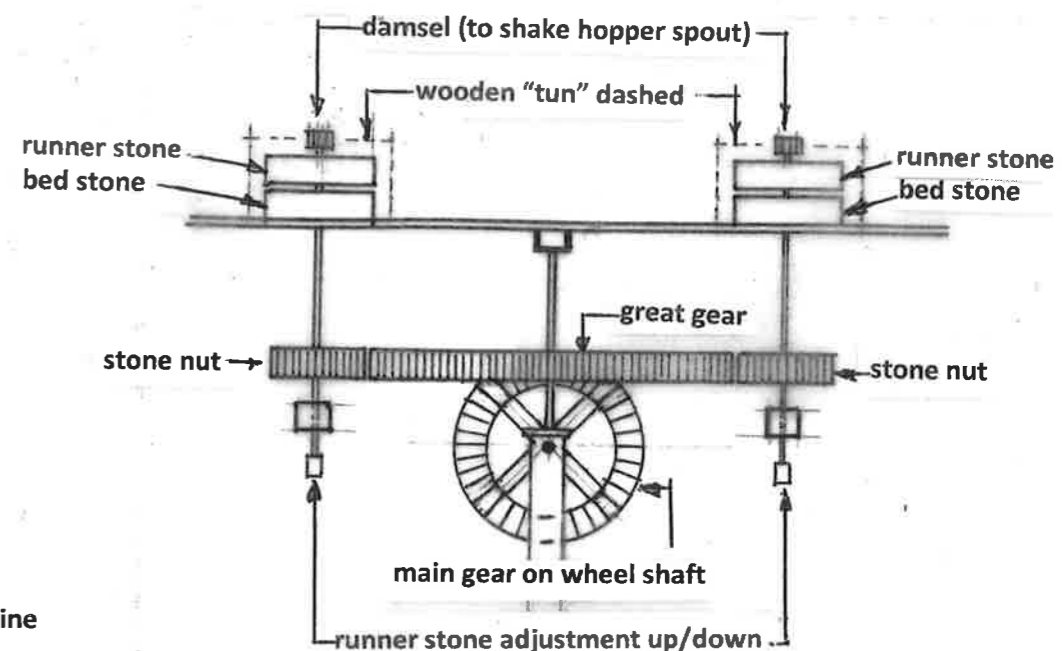
same building as the actual mill which remained a common layout. Connecting doorways was not the preferred option but did exist in some complexes. I suspect at some point the roof at Lundin Mill was replaced and the preferred penetrating stone partition between the kiln & mill, finished with raking stone skewes to form a fire break was cut down and the pan tiles continued straight across.

The atmosphere on the drying floor would have been incredibly smoky, ventilation provided by the vent cowl at the ridge and through the loosely fitting pan tiles. The two windows would be opened to assist with both daylight & ventilation and to create "stack effect" ie to assist in drawing the heat up from the kiln firebox below.

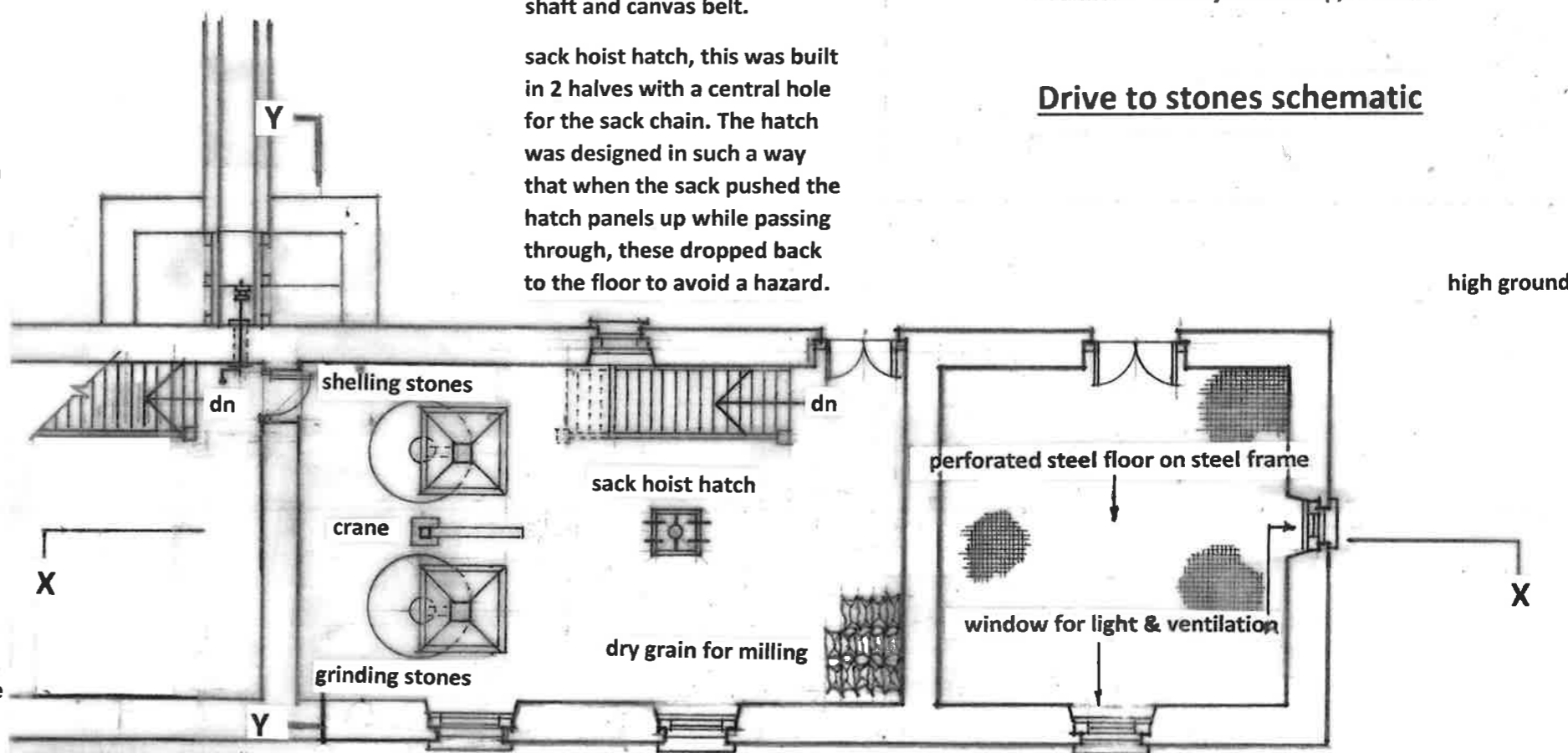
Sack hoist

Sack hoist operated by line shaft and canvas belt.

sack hoist hatch, this was built in 2 halves with a central hole for the sack chain. The hatch was designed in such a way that when the sack pushed the hatch panels up while passing through, these dropped back to the floor to avoid a hazard.



Drive to stones schematic



Upper Ground Floor Plan (scale 1:100)

These drawings have been produced with the assistance of the Glasgow University Archaeological Research Division report carried out during their watching brief in 1995 while the farm and mill was being demolished by Andrew Cook, Scoonie Park, Leven on behalf of Bett Homes, Dundee.

The masonry materials from the demolition were taken to the former mill dam at Pilmuir farm, Cupar Rd. The pan tiles of at least the range of buildings containing the former mill were removed prior to demolition presumably for sale or re-use on the estate.