

Largo Oil & Cake Mill, mill house ground floor plan of circa 1861, scale 1:100. August 2018, John Band

Brief description of the seed crushing process; The bags of unprocessed seed are tipped into a hopper on the first floor of the mill and trickle fed down into a pair of unequal sized steel rollers "A" which are driven by a belt and line shaft from the steam engine, this bruises the seed. The seed is transferred by hand onto the bed stone of the edge runner stones "B" (powered by the waterwheel and gearing) which crush the bruised seed. The resulting paste is then placed in the kettles "C" (heated by steam from the engine) and mechanically stirred to ensure full heating of the product. The resulting hot paste is then placed in bags and surrounded by a leather or timber "wrapper" called hairs (traditionally made of horse hair), these bags are then placed on one of the 4 boxes on the hydraulic presses "D". The pumps "E" are then activated by shaft and belt drive to work the press (one pump per pair of presses). The oil is expressed through the bags and gathered for storage within the stone "spell tanks" (a spell being a day's work) "F" sunk into the floor of the mill. The 3 pumps "G" are employed to pump the oil into a first floor tank in the adjacent building from where it is agitated and filtered to remove impurities prior to flowing by gravity down to the cask filling area in the mill cooperage ready for loading onto carts by the outside overhead block & tackle and transport to the customer. The oil being used for paint/varnish, linoleum, putty and many more products. The cake from the presses is removed and paired (trimmed) before being stacked on racks to cool and dry (to avoid turning mouldy) prior to being fed into the belt driven cake breaker "H" and bagged for farmers to use as cattle/sheep feed.

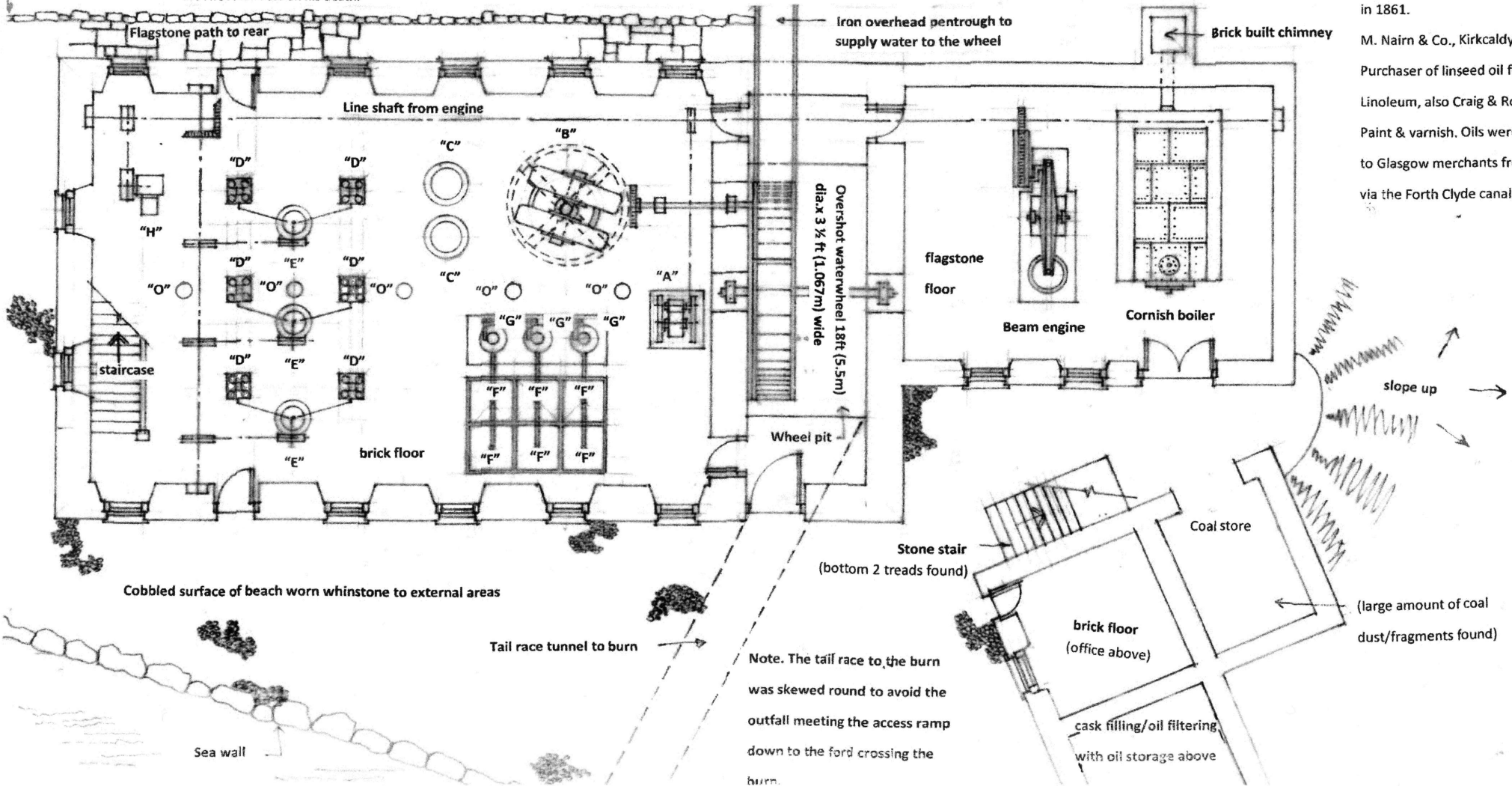
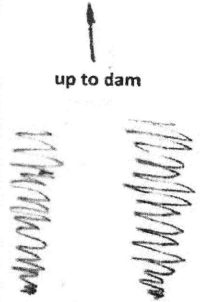
Note. The position of the bruising rolls, edge runners, hydraulic presses, spell tanks, adjacent pump sumps & waterwheel pit are accurate as foundations etc. for same were found/surveyed during the construction of Seatoun Place by Robert Band in 1983 Heating kettles, press pumps and cake breaker have been shown in locations (due to their relatively light weight not requiring foundations) which make sense for a "flowing" process. Door / window / wheel pit etc. locations were surveyed 1983 and tie in perfectly from the many photographs I have of the completed buildings & in their roofless and part demolished condition. The Cornish boiler details and information regarding the type of steam engine came from a description of Largo Oil Mill by David Wallace who started his seed crushing career at Largo in 1860 and was published in the Fife Free Press on his death.

"O" Steel columns to support upper floor seed store

Seed crushed at Largo;- Linseed, (locally produced and imported from India & Europe) Cottonseed, (from India & Egypt) Maize, & Hemp (from India).

Largo is recorded as the first mill to produce edible oils by a filtering system Patented by David Russell in 1861.

M. Nairn & Co., Kirkcaldy was a large Purchaser of linseed oil for Linoleum, also Craig & Rose, Leith for Paint & varnish. Oils were exported to Glasgow merchants from Largo via the Forth Clyde canal.



Note. The tail race to the burn was skewed round to avoid the outfall meeting the access ramp down to the ford crossing the burn.

(large amount of coal dust/fragments found)