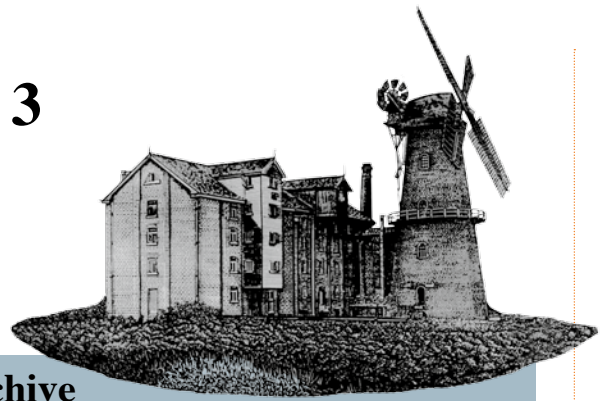


Successful Country Mills no 3

Messrs. Press Brothers' Green Cap Flour Mills, Great Yarmouth

(From *The Miller* July 5th 1896)



Milling Journals of the past at the Mills Archive

by Mildred Cookson, The Mills Archive, UK



The early editions of *Milling and the Miller* record how over a hundred years ago roller flour milling was being introduced into this country and many small mills just could not compete with the output they produced. This series describes

how some of these mills that started out, eg as a basic windmill, survived.

An interesting example is the Yare Flour Mill, which, around the year 1886, was fitted out with a complete roller system by WR Dell & Son of 26 Mark Lane, London. The firm that owned the mill was founded by the father of two brothers, and then named "Press Brothers". As a young boy in the 1830s he served his seven years' apprenticeship to a miller at North Walsham, in Norfolk. After serving his "time" he took up farming for a while and during this period his two sons were born. While his sons were growing up he decided to look for a mill, and in the year 1851 he found a windmill in excellent condition, nine storeys high and with 5 pairs of stones.

Not long after acquiring the windmill the business was thriving and he was able to extend the premises by the addition of the steam mill, (shown in the illustration). The windmill was still used for the grinding of the grain, but the meal was then purified and dressed into flour in the steam mill main building. Later the windmill was converted into a screen house and granary for the roller mill alongside. The shape of the windmill lent itself to the construction of silos on the upper floors as illustrated.

A few years later, the business continued to boom and they needed to extend their premises further to increase capacity. What better thing to do than buy another windmill? Standing close to the old premises on the opposite side of the road was such a mill. The second windmill, a fine brick building eleven storeys high, was said to tower above all other similar structures in Yarmouth. A few years afterwards the firm modified their millstone grinding in favour of a combined system; this now gave them eighteen pairs of stones and twelve sets of porcelain and chilled iron rolls. The eventual outcome of this was that they decided to go the whole way and convert to a complete roller system. So in 1886 the Dell system was installed. Sadly all the old wind powered machinery was thrown out!

Press Brothers had created the first complete roller mill in Yarmouth and was by 1886 turning out a fine quality of

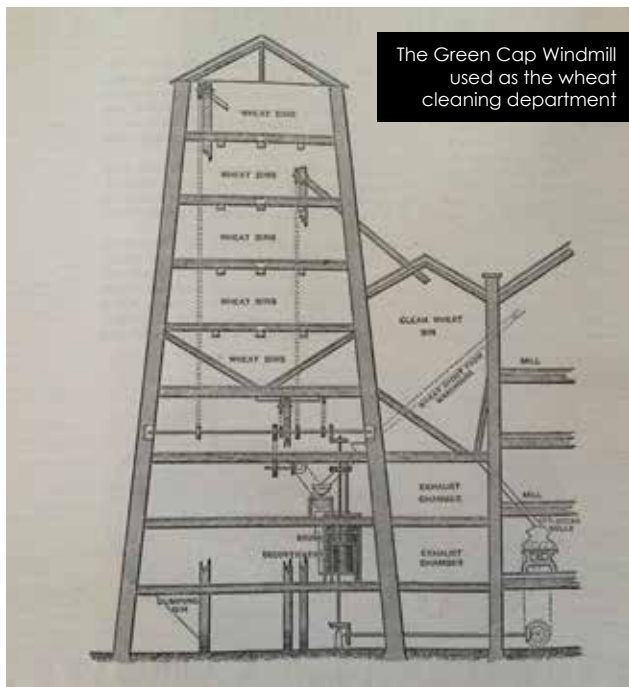
flour, using 50 percent Norfolk wheat. The mills, situated conveniently in the southern part of the town were within easy reach of both railway and canal.

The power required to drive the steam mill came from two horizontal engines, one for the roller mills and wheat cleaning machinery, the other for the dressing machines. The engine driving the rollers and wheat cleaning was a horizontal compound engine with condenser working at about 100 horsepower, with a flywheel of 16ft diameter and 3ft stroke. The engine was built by Messrs. Riches and Watts, the well-known engineers of Norwich. The second engine driving the dressing machinery was of 25 horsepower, with a flywheel of 12ft diameter, and transmitted its power on to the second and third floors of the mill by belt drive. The steam required to drive the two engines came from two Galloway boilers. The steam mill occupied 6 floors.

The ground floor contained a spur wheel which was

An advertisement for a flour purifier. At the top, the headline reads "The Victor of a Hundred Fights!!". Below this is a detailed illustration of a large, multi-tiered industrial machine with various rollers and a hand crank. Underneath the illustration, the text reads "The GEO. T. SMITH PATENT PURIFIER". A smaller line of text states "Has been tried against every Machine now in the market, and in every case has". Below that, in large, bold letters, is "PROVED ITS SUPERIORITY.". Further down, it says "BEWARE OF INFRINGEMENTS!" and "CATALOGUES ON APPLICATION.". At the bottom, the name "WM. R. DELL & SON," is printed in large letters, followed by "26, Mark Lane, London, E.C.". The entire advertisement is set against a light, textured background.

An 1886 advert for the Smith Patent Purifier



and low grade - were also packed on this floor. The other four floors held the dressing machinery for separating the broken grain from the semolina, middlings and flour. From the second floor you could access the workshop containing a lathe, circular saw, and other tools required for small and emergency repairs when the millwright was not available. The dressing machinery by George T Smith featured purifiers and centrifugals with one dusting reel.

A separate building some short distance from the mills provided the stive room where the fluff etc was collected. This building, measuring 15ft x 20ft and 22ft high and was made completely of wood. The floor was perforated with some 220 holes and each perforation had a canvas pipe hanging through to the ground floor immediately below. The canvas pipes were tied at the ends and were cleaned by shaking them by means of a lever before and after opening the end for letting out the accumulated dust.

The wheat cleaning was performed in the Green Cap windmill adjoining the steam mill. This had nine floors, the top five used for storing the wheat. The lower floors were used for cleaning the wheat. The wheat passed through a Coleman and Morton's wheat grader from where it fell into a Child's decorticator. The wheat after being brushed in a Barnard and Lea's brush machine was elevated to the eighth floor where it was conveyed by a spout into the adjoining building into a clean wheat bin, from here it would be conveyed to be converted into flour.

These early articles contain much detail, which can only be glimpsed in a summary like this. If you would like to know more please contact me at mills@millsarchive.org

fixed on the crank shaft of the engine inside the mill, 9ft 1 in. in diameter, having a 9in. face. This spur wheel, by means of three pinions, drove three lay shafts on this floor, driving the roller mills on the floor above. The first floor housed 20 sets of Clark's double roller mills, placed in three rows for the breaking of the wheat and the reduction of the semolina. The flour, three grades - patents, bakers



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ALTUNTAŞ GROUP
 ADANA İSTİKAMETİ 18. Km. P.K.59 68100 AKSARAY / TÜRKİYE
 Tel : (+90 382) 266 21 20 (10 hat) - Fax : (+90 382) 266 21 30
info@obial.com.tr