Millwrighting And Mill Tantrums

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Looking at the splendid photograph of my father and brother in Brian Flint's book 'Suffolk Windmills' took me back over forty years to when my father and his miller Herbert, somewhere around 1935, were turning over lumber in the carpenter's shop in search of planks and lift jacks intended for the carrying out of a major maintenance operation on the old post mill at Drinkstone. My father was a good carpenter and did much of his own 'millwrighting' - unlike his own father who left it to the millwrights. "They were always on the place" said my father - and there must have been much to do, for he owned two old wooden windmills, both in one yard.

Now, my father and his man had a big job on hand for the mill was headsick -a not uncommon complaint with post mills. Here it was a matter of cause and effect. One of my ancestors had found the buck (the upper revolving wooden portion) a little cramped and had had an extension of a foot or two spliced on fore and aft. This gave improved floor space but the strain was too much on the older timbers and the mill began to sink at the head, where the weight of the sails and the pole end of the windshaft was carried.

Matters worsened over the years and reached a stage where the trailing edges of the two common sails (nearer the roundhouse than the spring patent sails) scraped the tile-roofed circular jutting edge. The trouble was got over for a time by slackening the bolts holding the whip, or sail centre, in place and putting in a packing of wood between whip and stock at the point furthermost from the sail's centre, so taking the sails further away from the roof edge. Alas - the head continued to sink and there was nothing else to do but try to lift up the entire sails unit and windshaft poll end and to put a suitable wooden block under the neck bearing and so cure the trouble, one hoped, for all time.

So my father and his man hunted about and eventually assembled the necessary paraphernalia on the mill hill, a still day being chosen. The two foremost shuttered sails were stopped in an exactly upright position and a long stout plank about eight inches wide was laid on the ground and in line with the end of the bottom sail. Along and on the plank were placed three lifting jacks, evenly spaced in a row, and along the tops of the jacks was laid a second long, stout plank. When the unit had been assembled and all was in line the jacks were screwed upwards until the centre of the upper plank was hard up against the whip end of the vertical sail. Now came the crunch. My father screwed at the jacks in a business-like way and sails and poll end began to rise until about six inches showed on the threads of the jacks. This should have been sufficient to clear the shaft and pole end of the neck bearing, but when they climbed aloft to check the matter they found the neck still resting snugly in its bearing.

Back to earth once more it was realised that the lift of the jacks was simply transferring the weight from the neck end of the windshaft to the tail end of the same and that the mill structure was reverting to its original and proper position. Perhaps another few inches of the jack threads might lift the neck clear of its bearing, so a few more turns were made... but the sail began to bend, the row of jacks to heel over and my father and Herbert retreated, running backwards, as down came the sail unit with a mighty bump, miraculously, as it turned out, doing no harm to the mill structure.

After that my father had to take a simple but more risky course of setting the jacks inside the mill at the head and lifting the shaft clear of the neck bearing through the medium of an upright beam. While this was going on, the mill structure creaked and groaned, but stood the strain, the neck was lifted clear, the block placed beneath the bearing and a good job made of it. Later any further settlement was prevented by fitting two tieirons, which passed diagonally from crowntree to the timber frame at the bottom front end of the mill.

One found some of the troubles with old windmills cured themselves if given time enough. The applewood band brake would seize and stick when used for slowing up the mill sails, but then suddenly decided to behave and was no more trouble. For months the tail windshaft bearing ran so hotly it threatened to set the mill on fire, then suddenly cooled and caused no further anxiety. The spindle bearings in the bedstone ran hot and cold and the step brass boiled its oil, but at some time or other each of these tantrums was corrected. These were some of the moods of old mills.