# **Emsworth Corn Mills**



The Quay Mill. Photograph by courtesy of the Hampshire Cultural Trust Copyright.

# Margaret Rogers May 2018

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The harnessing of tidal and river water power has been a long established practice among many south coast communities, the power being put to a variety of uses. On her early travels in the south Celia Fiennes observed whilst in Chichester:

...; there is an Engine or Mill about a mile off the town draws up salt water at one side from the sea and fresh water from a little rivulet which descends from a hill, and so supply's (sic) the town.<sup>1</sup>

All mills naturally had marked concentrations in coastal locations and close associations with the surrounding farms which supplied them by ox- or horse-drawn waggons with corn and barley or wheat. Even at the beginning of the twentieth century there must have been as many as two hundred mills still working in Hampshire, though they were fast dying out. Over time Chichester had ten mills and during the nineteenth century Emsworth had no fewer than eight working mills - two water mills, one windmill and two steam sawmills, and three tidal. They formed part of the arc of mills stretching round Chichester and Langstone harbours from Hayling in Hampshire, which had a tide mill at Mill Rythe, to Birdham in West Sussex and were situated on some of the many chalk streams of the two counties which provided an ample supply of water power with little seasonal variation. A few mills relied on mill ponds either filled by tidal water, or were fed by a stream. During the eighteenth century the pattern of export trade from Chichester changed from that of predominantly unmilled grain to flour, reflecting the great increase in milling capacity in the region and the ease of transporting that flour when the London, Brighton & South Coast Railway line came through West Sussex and into Hampshire later on. Water transport of flour risked damage from dampness or seepage and stone-milled flour did not keep in good condition for very long. Encouragements to mill owners to increase production in the mid-nineteenth century were brief, however, and curtailed due to the repeal of the Corn Laws in 1846, allowing the importation of foreign wheat. Another reason for the decline was the

introduction of the roller milling system which could produce enormous quantities of flour quickly, when compared to the output from the traditional stone-ground mill. To cope with rising flour demand nationwide many large steam powered roller mills were set up, several within the Port of London itself.<sup>2</sup> This system had been developed on the Continent and by 1880, its advantages had become apparent in England as it could produce white flour and was ideal for grinding the harder imported wheat. Several mills in West Sussex installed the new roller system in an effort to survive, as did Emsworth Town Mill<sup>3</sup> (SU 752 058), built in 1896 after several fires had destroyed others on the same Queen Street site.<sup>4</sup>

The siting, building and maintenance of the mill of whatever design depended upon the millwright whose engineering skill and knowledge was obtained by serving a long apprenticeship, commonly as with doctors, as part of a family tradition.<sup>5</sup> The fact that Emsworth was the site for three tide mills reflected the expansion of Chichester harbour trading in the late nineteenth century. The principle on which such mills operated was very simple. The rising tide was admitted through gates into a large pond. As the tide began to fall the gates closed thus impounding the water, which was then let out through mill races to operate water wheels.<sup>6</sup> All the mills were built of local materials and many were timber-framed with brick to the first floor. The soft clays known as brick earth, found close to the surface, and easy to dig out and process by hand, were plentiful along the south coast near Emsworth and several small brickfields and brickworks were to be found in and around the town,<sup>7</sup> their produce being offered for sale in the local press.<sup>8</sup> The Round House at the southern end of the Hermitage Rope Walk, Emsworth, was a Puddling Mill, driven by horses, which conditioned clay for their brickmaking. However, with the introduction of the Brick Tax in 17849 and its increases in 1794 and 1803, many new mills reverted to a cheaper, more conventional, timber-framed construction.

In 1796-1800 it has been calculated that the average value of a windmill in England and Wales was £438, and of a water mill £817. Even in 1816-20 the average value of a steam mill was  $£3,338^{10}$  so anyone contemplating mill-ownership had to have substantial capital backing. The miller himself had also undergone an apprenticeship of several years, at the end of which he

could legitimately call himself a master miller.<sup>11</sup> often holding a prestigious position in the community.

In a small town such as Emsworth the two large and powerful water mills, the Town (formerly known as Lord's Mill) and Lumley water mills, could easily have accommodated all the town's requirements for ground corn products. Why, then, were there so many in the community? The answer lies in the ease of transport access by water and road to lucrative consumer markets in Portsmouth and London. The former was a town without a river and only windmills and one tide mill to provide flour for its civilian inhabitants and the fluctuating demands of the army and naval dockyard, at their peak whenever French war threats materialised. In 1778 Emsworth also had a singular advantage in its corn exportation:

The harbour of Portsmouth is divided from that of Emsworth near the port; and, what is very remarkable, the corn, merely carried out of this harbour, is in the strictest sense of the word, deemed exported, and, as such, is allowed the county money, which is paid precisely the same as if it were really sent to a foreign port.<sup>12</sup>

The newly-established permanent military encampment at Aldershot, built between 1854 and 1859 for 20,000 men in the north of the county, also required similar provisioning. When England was at war demand for flour and flour products soared, and the millers and bakers of Emsworth were only too pleased to satisfy that demand. Unfortunately, when military requirements waned many millers, including some in the Emsworth neighbourhood, were faced with bankruptcy or chose to let out their premises.<sup>13</sup>

The most northerly of the Emsworth mills was the water mill at Lumley (SU 752 064), part way between the town and the village of Westbourne. It was built by Lord Lumley in 1760 and was part of his Stansted estate, lying on the Sussex bank and powered by a leat or canal specially dug for this purpose from the river Ems which goes past Westbourne Church and was powered by an iron overshot waterwheel.<sup>14</sup> Civil engineer John Smeaton (1724-1792) had already proved in the eighteenth century, as a result of some six years' research, that overshot water mill wheels were more than twice as efficient

as undershot ones, nevertheless the majority of those used in Emsworth were undershot with the exception of that at Lumley. Eighteen years later Lumley Mill passed into the ownership of Richard Barwell (1741-1804),<sup>15</sup> who had purchased the Stansted estate. Edward Tollervey, an astute and prosperous baker and miller-cum-businessman from Portsmouth, known to have been a war profiteer and a man of considerable substance at that time, was the next owner of the Mill in January 1802, over-indulging his schemes of development.

He built a large pseudo-Gothic house, outbuildings and stores, in which he installed ovens to bake bread and biscuits and also erected pigsties because he had secured contracts with the Admiralty and others to supply them with salt pork, bread, biscuits and flour.



Lumley Mill. Photograph by courtesy of the Hampshire Cultural Trust, Copyright.

The corn was ground, turned into biscuits for the fleet and shipped off to Portsmouth dockyard and up to 14,000 troops in some of the nearby military facilities, as well as the growing number of townspeople in Portsmouth. The grist or middlings and spoiled biscuits were then fed to the pigs which were also processed and sent to the dockyard, thus reducing pig foodstuff costs and further increasing his profits. Additionally products such as malted barley were sold from the maltings at Lumley at that time. Horse-drawn waggons, stored in the nearby Mill Cottage, journeyed from there to Portsmouth weekly. Normally occupational linkages such as Tollervey's both encouraged the efficient use of labour resources and promised a degree of market stability but by over-extending himself too rapidly and placing overdue reliance on war contracts he ultimately became bankrupt.



In 2017 the present owner of Lumley Mill had the site of the bakehouse, which lies opposite the former mill workers' cottages, cleared and placed the following notice next to the gateway:

#### Our Garden is Undergoing Transformation

The purpose is to remove self-seeded sycamore trees which were slowly destroying the foundations of the old mill and a number of trees were unstable that we have been instructed to remove.

Our intentions are to replant native species of trees to replace the ones being removed. We aim to preserve the beauty of this environment and also to ensure that the history of the old mill is not lost forever.

Now that the area is opened up we can appreciate the old chestnut trees, huge plane tree and ancient yew trees.

Please rest assured we love this area and the nature that lives here and it will look beautiful again.

(For purposes of insurance, unfortunately, we are going to have to reinstate the fence).



This is the site where Lumley Mill originally stood, built in the 18th century it was a working mill that provided biscuits and pork to Portsmouth Dockyard. Sadly the mill burnt down in May 1915. The remaining structure was demolished in 1929 leaving behind the foundations we are trying to protect today.



This photograph shows in the top right hand corner the culvert which allowed the leat from Westbourne access to the mill. *These three photographs were taken by Margaret Rogers.* 

Just half a mile north of Lumley at Westbourne was a paper mill, which exported some 116 reams of brown paper coastwise, mostly as small make-weights in the corn cargoes and transported to Devonshire.<sup>16</sup>

Other sailing ships such as the *Carrie* and the *Exchange* (owned by the firm of Messrs. Dittman & Malpas), both built in Emsworth, were also employed in the corn seed trade and plied a similar route. Unfortunately, with the cessation of the Napoleonic wars in 1815 Tollervey's contracts ended, the Admiralty built its own mills and bakeries in Gosport and he became bankrupt in 1820. The sale advertisement for Lumley Mill in 1821 gave some idea of the size and scope of the business there:

The Mill is close to the quay at Emsworth, on a stream of uncommon and unceasing power, having stores that could accommodate 500 loads of grain or flour, an extensive malthouse, threshing machine, biscuit manufactory, three large bread ovens and a large residence.<sup>17</sup>

*Pigot's Directory* (1832) shows William Sheen (sic) as Lumley Mill's then owner and the Mill, dwelling house and land were again advertised in a local newspaper on 9 October 1837 "to be let on a long lease or from year to year", during a notably black period for the fortunes of many Emsworth mill owners, and between 1842 and 1860 the mill was owned by Admiral Edward Harker in partnership with William Shean the miller again. James Terry (1824-1906) was the next owner, purchasing Lumley in 1860 for £5,000, following Mr. Shean's death, Mr. Terry's father first being the miller and then his nephew, the last miller until the mill and most of the outbuildings were destroyed by fire on 24 May 1915.<sup>18</sup>

Perhaps the earliest Emsworth mill is that known as the Town Water Mill (SU 751 058), situate at the bottom of what is now Queen Street (formerly Mill Lane and Dolphin Hill) and worked by a specially diverted branch of the Ems which leaves the main stream at Lumley and provided with a legal stipulation that Brook Meadow was not to be flooded at times when the mill was working.<sup>19</sup>

It was certainly in existence in 1724 when Defoe refers to it as "two mills under one roof, one a wheat mill and the other a malt mill, and by 1741 Emsworth Mill, known then as the Lord's Mill, was leased to Richard Andrew for £50 per annum, and this was the predecessor of the Town Water Mill. There has been a succession of mills on this site, replacing earlier ones lost to numerous fires, flour dust being an extremely combustible material, and all using their predecessors' leats. The first of the two mills in existence here during the nineteenth century was auctioned on 16 May 1820, with the following particulars advertised in the *London Gazette*:

To be sold by auction on the 16 May 1820 at the Black Dog Inn, Emsworth, under the commission of bankruptcy issued against Thomas Booker, late of Emsworth – miller and corn merchant. All that capital freehold water corn mill situated at Emsworth with 3-pairs of stones, smutter, with spare running gear. Mill is grinding 15 to 20 loads of wheat per week. A considerable sum of money has been expended in putting the mill and machinery into complete repair.<sup>20</sup>



Town Mill





The Town Mill. Please note that the original fenestration has been retained throughout several ownerships. *Photograph by Margaret Rogers* 

Clearly the mill did not sell on this occasion, as a fulsome re-advertisement appeared in the *Hampshire Telegraph* for a second auction in October that same year, this time with the addition of *'about 8 acres of valuable water meadowland, a good garden and preserve of fish'*.<sup>21</sup>

The 1832 *Pigot's Directory* recorded that Messrs. Clarke and Hellyer were now the Town Mill occupiers,<sup>22</sup> also described as grocers and tea merchants, but this partnership was dissolved in 1853 when they became maltsters, ship owners and coal merchants. The Town Mill then passed into the hands of Charles Barnham until his death in 1891. The damage caused by the spectacular Town Mill fire on Friday, 21 August 1896, was variously estimated to be between £4,000 to £5,000, when Messrs. Chatfield and Whetton who then owned the mill, which at that time contained supplies left by customers of maize, oats and barley waiting to be ground.<sup>23</sup> The prompt action of Emsworth Fire Brigade managed to save the millhouse and two valuable horses in the stables, but the fire completely destroyed the site, leaving only the bare walls of the mill itself which were so badly damaged that they had to be pulled down. It had only recently been fitted with a two-sack roller plant.

After the disastrous fire they rebuilt on the gutted site overlooking Dolphin Quay a large four-storey brick-built mill with a slate roof and an external hoist over a centre bay. It was provided with two pairs of stones along with a completely new set of modern steel rollers and a 25hp. oil engine, improvements now necessary if the mill was continue as a viable business. In the past there had been a much stronger head of water running Town Mill, being turned by the stream until well into the twentieth century,<sup>24</sup> but that flow had now begun to decline. It was ultimately sold to Leigh Thomas & Co. Ltd., described as provender and grain merchants, who then installed electricity and ran a functioning mill until 1939.

The sole windmill locally was a timber smock mill with two pairs of stones situated just inside the West Sussex border on a slight rise in an area east of Emsworth known as Gosden (sometimes Gosdown) Green. This mill was in existence in 1784, when a Joseph Harfield insured it for £500.<sup>25</sup> Henry Rook was milling there in the 1840s and Andrew Bone Hatch had taken it over by 1855. In an effort to maintain trade some windmills turned to grinding chalk, as many houses then used whitewash to cover their walls. Hatch had his windmill dismantled in the 1860s, during which time he was in the process of building the New Slipper Tide Mill (SU 754 053), following a dispute with Thomas Byerley,<sup>26</sup> owner of the nearby Old Slipper Mill (SU 754 055) between 1845 and 1852, who argued that the tail water interfered with the running of his mill. Tide mills are usually built either on causeways situated in the upper reaches of a river estuary, the causeway forming both a bridge and a dam, or, as in Mr. Hatch's Mill, at the top of the Emsworth Channel partitioned off from the Ems-fed millpond by sluice gates.<sup>27</sup> Unfortunately, by the time Hatch's second mill was built (1867) it was far too late to be commercially viable, as it could not develop its full power owing to the flow of water from the Old Slipper Tide Mill robbing the wheel of its power

supply. This naturally was a great annoyance to the New Slipper's owner and an attempt was made to power the New Slipper by steam; a chimney was built and a boiler brought to the site. The mill only survived for just over thirty years and, like others in the town, succumbed to a fire, the roof falling in onto "all the machinery which had but recently been erected" and was completely destroyed on 28 February 1886.<sup>28</sup>

The Old Slipper Tide Mill was constructed c.1735 by Thomas Hendy, miller and merchant, by enclosing part of Norton Common on the Sussex side of Emsworth to form the tide pond.

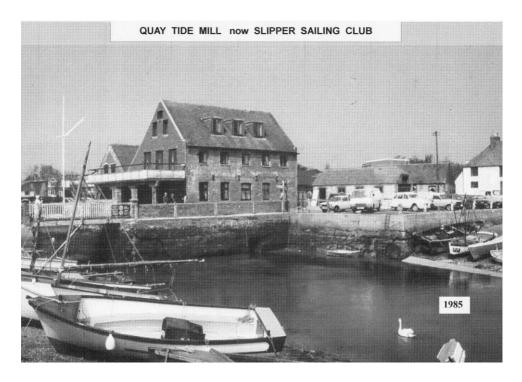


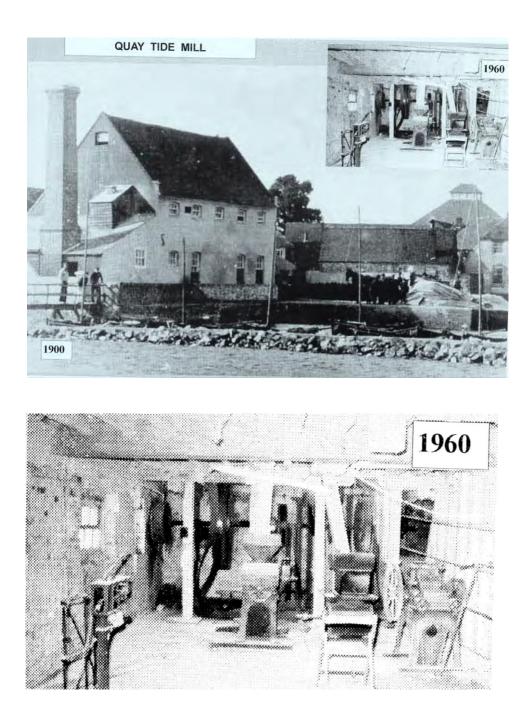
The Sluice Gates, still in operation in 2018. Photograph by Margaret Rogers.

It was a three-storey brick built mill with a corrugated iron roof. The wooden waterwheel drove iron wheels and a wooden upright shaft and two pairs of stones.<sup>29</sup> From the crown wheel there were drives to a combined kibbler and fine crusher, grindstone, shaker screens with blower, and an assortment of ancillary machinery with a sack hoist of special interest. It was powered from a pond fed from a combination of water from the River Ems and the ebb tide flowing out to the Emsworth Channel.<sup>30</sup> The head of water drove the undershot wheel beneath the mill for about five hours on each tide which governed the miller's working hours – four or five hours between both tides each day<sup>31</sup>. Relations between the owners of the Old Slipper Tide Mill and that of the New Slipper Tide Mill were acrimonious as the second named had only a reduced water power, as outlined above. The Old Slipper Mill went through comparatively few changes of ownership and occupation starting with Thomas Hendy,<sup>32</sup> followed by John Cousins & Son,<sup>33</sup> then Thomas Byerley<sup>34</sup> and by 1895 it had passed on to Fred Byerley. The Hendy family also built wharfage at the Slipper, which became Hendy's Quay<sup>35</sup>. On this were a timber vard, malthouse and a soap factory, for which a landmark chimney was built. The quay was later occupied by Foster's Steam Saw Mill. (see below).

The Quay Tide Mill, (SU 748 055),<sup>36</sup> first appearing in the records in the mideighteenth century, was a two-storey timber-framed building of brick with a red tiled roof.







Built on the town's quayside on the western side of the harbour and powered by a 10-acre millpond made by enclosing the creek with an embankment in 1760, the pond was so constructed that small vessels could enter at high tide through the single lock gate and moor alongside the wall between the mill and the granary.<sup>37</sup> Thus milled products did not need ferrying out into the channel. Like the Slipper Tide Mill this, too, was powered by an undershot waterwheel and had three pairs of stones. Baking ovens and a miller's house were built next to the mill.<sup>38</sup>



The Quay Mill Storehouse on Bridgefoot Path is now owned by ESSC (Emsworth Slipper Sailing Club). Note the pulley still attached at the top. *Photograph by Margaret Rogers.* 

Although it was a tide mill water also came from the Westbrook, allowing a slightly longer run than if the mill was powered solely from one source. Steam engine power was used here in 1884 to bolster its power, the pond levels having become too low to drive the wheel.

Like all manufacturing industries concerned both with the collection of raw materials and the delivery of finished products, Emsworth's millers adapted the form of transport of both incoming and outgoing supplies related to the nature of their goods. Unquestionably, improved transport facilities to and from Emsworth ensured better, fresher produce arriving at retail and consumer outlets and millers quickly adapted their transport arrangements to constantly changing markets in order to benefit from these.

Farm supplies arrived at the mills by waggon; milled sacks of flour, bread and biscuits left by water and rail to London, and Portsmouth and Aldershot military markets. As flour and flour products were naturally at their best when fresh, the speed of rail transport undoubtedly helped retain their quality on arrival at retail outlets, now accessible at a greater distance. Ironically, and despite improved, speedier transport, the decline in military-based markets was sufficient to cause many millers based on the south coast hardship. Portsmouth and London's rising population demands were almost alone in rescuing some from bankruptcy. Others submitted contracts for supplying the Union workhouses at Westbourne and Havant and supplied flour to surrounding bakeries and malt to local breweries.

### References:

1 Fiennes, Celia, Her Journies between 1685 - c.1712 (ed) Christopher Morris, (Macdonald & Co. 1982), p. 62.

2 Stidder, Derek and Smith, Colin, Watermills of Sussex. Vol. II (Stidder & Smith, 2001), p. 9.

3 Ibid., p. 9.

4 GL, MS. 504152/329, p. 171. On 26 April 1785 Joseph Holloway Snr. and Joseph Holloway Jnr. took out insurance of £500 on their brick, timber and slated water corn mill in Emsworth.

5 One of the local traditions handed down from miller to son was that when the sails of a windmill were left at rest in the form of a cross it indicated a significant event of happiness or sorrow in the miller's family, such as a wedding or a funeral.

6 Brook, F., op. cit, p. 17.

7 Two were situate on either side of the New Brighton Road and Westbourne Road and owned by James Henry Shilling, brickmaker (map 1852); Gawen Holloway was also listed in Pigot's 1830 Directory as an Emsworth brickmaker; two brickfields were shown in Bath Road on an 1880 map, one at Westbourne Common from 1859, another at the north-east comer of Monks Farm, together with brick and tile works and clay pits, and two others at Lumley and Hermitage. There was also an important brickworks at the Rowlands Castle Brick and Tile Company and several small family-run brickmaking works on Hayling and Portsea Islands.

8 HX. 2236, 15 August 1842, advertised the following: BRICKS FOR SALE, a large quantity of capital CLAMP BRICKS @ 27s. per thousand – cash. NB May be shipped at a trifling expense. Apply to Mr. Hale or Mr. King, Auctioneer, Emsworth.

9 Buildings were taxed by the number of bricks used; when bricklayers doubled the size of the bricks to reduce the size of their taxes, the government replied by setting an increased tax on the larger bricks. The repeal of the Brick Tax in the 1850s further enhanced brick's popularity and usage.

10 Reger, John, op. cit., p. 108.

11 EMHT, Yoward, T., Mills and Millers. Emsworth Paper No. 5, (2003).

12 HRO 16M79/26, G.MSS. William Bingley (1774-1823) and His Proposed History of Hampshire, notes on Warblington, contained in an Appendix to Jill Clayton's unpublished MA dissertation in Regional and Local History and Archaeology (University of Winchester, 2007), p. 79.

13 HT, 1952, 6 March 1837, advertised a water corn mill to be let at the Hermitage, Emsworth, HT, 1964, 29 May, 1837 advertised Mr. John Cousens' (bankrupt) flour for sale, and HT, 2610, 13 October, 1849, advertised another windmill to be let, at Chidham, nr. Emsworth.

14 Brownridge, F. H., Lumley Mill, Lumley, Emsworth, J.P.C.T.I.A.S. (1969) Vol. II, p. 50.

15 Yoward, Tony, The story of Lumley Mill. Emsworth. (privately published, 2007), p. 2. Barwell was an unpopular 'nabob' who had made his fortune in India with the East India Company.

16 Much of the information about Lumley Mill was kindly supplied by the present owner, Laurence Lafosse, who also quoted notes in the Port Books and A. H. Shorter, Paper Mills in Sussex, Sussex Notes and Queries, vol. xiii (Nov. 1951), pp. 169-174.

17 SWA, 3840, vol. lxxiv,28 August, 1821

18 Yoward, Tony, The Story of Lumley Mill, op. cit., pp. 21-22.

19 EMHT, The Emsworth Echo. November 2005, p. 3. Archivists' Report No.

20 Quoted in Stidder, Derek & Smith, Colin, op. cit., p. 116.

21 HT, 1085,24 July 1820.

22 Formerly owned by William Ayling between 1815-1830, who later went into partnership with Gawen Holloway.

23 a HT, 5998, 29 August 1896.

24 This power source continued to hold until increasing population demands led to the tapping of the river bed higher upstream at Walderton, ultimately adversely affecting the flow of the river.

25 GL. MS. 11936/319. Sun Fire Insurance Policy No. 489669, 14 February 1784.

26 Byerley also owned Westbourne Mill (SU 807 074).

27 When the tide turns the water is held back by the sea hatches (sluice gates) and released through the millrace, so turning the water wheel.

- 28 HL 5464, 6 March 1886.
- 29 There had originally been three pairs.
- 30 Stidder, Derek and Smith, Colin, op. tit, p. 120.
- Rudkin, David, Old Emsworth (St. Richard's Press, Chichester 2001), p. 14.

32 Thomas Hendy also enlarged the mill, the millpond and built Hendy's Quay – a wharf for the corn barges.

- 33 Pigot & Co.'s National Commercial Directory 1830. p. 192.
- 34 Kelly's Directory of Hampshire 1875. p. 71.
- 35 First ed. OS map 475290 105390.

36 Brook, F., The chronology of Emsworth's Quay Tide Mill, is described in The Old Industries of Emsworth, (J.P.C.T.I.A.S.). pp. 19-20, and is contained in Appendix VI.

- 37 Reger. John. Chichester Harbour a History, pp. 109-110.
- 38 EMHT, Paper No. 5, op. cit.



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