

OPERATING THE LOCKS AT DEDHAM AND FLATFORD

The principle of lock operation on the Stour is identical to that of locks on other waterways. However, both the locks at Dedham and Flatford retain the original unique and primitive winding methods for operating the paddles and a further difficulty exists as there are no balance beams by which the gates are swung open. Instead, there are chains fixed to the pointed end of each gate with which to pull the gates open.

SPECIAL INSTRUCTIONS - The paddles on both sets of gates are raised and lowered by means of winding a fitted length of chain around a horizontal capstan, for which capstan bars are needed. Because the paddles are of wood, once opened they are slow to close until the water has equalised on either side of the gate. Metal raisers fitted to the gates indicate whether the paddles are open or closed **BUT ON NO ACCOUNT SHOULD THEY BE USED TO FORCE THE PADDLES DOWN.**

In the interests of maintaining cordial relationships, and without prejudice to the legal position, it has been agreed that on the mill side, lock operators would, as far as possible, remain on the concreted areas and not step on the grass.

A) PROCEEDING UPHILL - LOCK EMPTY **(Top gates are shut and upper paddles closed)**

- A1. Enter lock.
- A2. Swing bottom gates closed by pulling on the chains provided. Close bottom gate paddles by turning the capstans.
- A3. Open paddles on upper gate by winding the capstans. **N.B. Take care to open slowly, operating one capstan at a time, as it is difficult to close the paddles until the water has equalised on both sides of the gates.**
- A4. When lock is full open upper gates.
- A5. Leave lock, close gates, leaving one paddle slightly open.

B) PROCEEDING UPHILL - LOCK FULL

- B1. Close top gates and paddles.
- B2. Open paddles on lower gates.
- B3. When the lock is empty, open the bottom gates and proceed as above (A1-5).

C) PROCEEDING DOWNHILL - LOCK FULL

- C1. Enter lock.
- C2. Close top gates and make sure paddles on the upper gates are closed.
- C3. Open bottom paddles slowly.
- C4. Open bottom gates when water in the lock has reached the lower level.
- C5. Leave lock, close gates. Close bottom paddles and open one upper paddle half a turn so that the chamber will fill slowly after you have departed.

D) PROCEEDING DOWNHILL - LOCK EMPTY

- D1. Close bottom gates. Ensure bottom gate paddles are closed.
 - D2. Open paddles on upper gates slowly- first one and then the other.
- SPECIAL NOTE - Remember these paddles cannot be closed until water has equalised on both sides of the upper gates.**
- D3. When lock chamber is full, open the upper gates and proceed as above (C1-5).

N.B. After use the lock chamber should be left full (see A5 and C5)