

We will suppose that water at 90 degrees has covered the straw in the vat, and that the supply has been checked. Fermentation ensues, and carbonic gas begins to be evolved four hours afterwards. The flax stems-well, and water is forced into the overflow pipe. A white froth

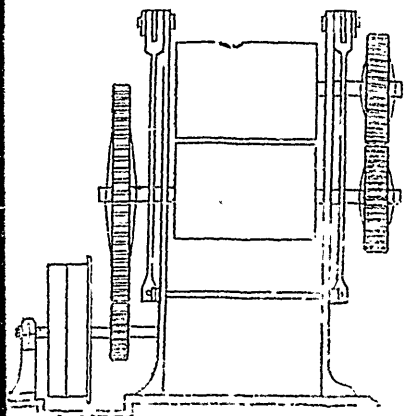


Fig. 10.

and scum now appear on the surface, and gather as the evolution of gas increases. The water is changed in color and taste. Hydrogen must also escape, as the application of a light ignites the whole surface of the water in the vat.

Sufficient water at 90 degrees is now admitted, to cause an overflow, which removes impurities, and leaves the flax in a fairer condition.

If the temperature falls too low, steam is easily let on to raise it to the required temperature.

Before the introduction of wet rolling, flax-straw was steeped for sixty and seventy hours. This improvement, with judicious management, has reduced the time to forty.

When fermentation has proceeded far enough, the vats are emptied, and the straw is immediately rolled. Before being caught by the rollers (Fig. 10) jets of pure water from a pipe above the feed table, fall upon it with a cleansing effect.

After passing the first pair, it is taken by a second and a third, between which it may be turned. Much of the epidermis is thus removed, thereby facilitating the subsequent processes of drying and scutching.

A system of levers is applied to each pair of rollers, which may be understood by a reference to Fig. 11.

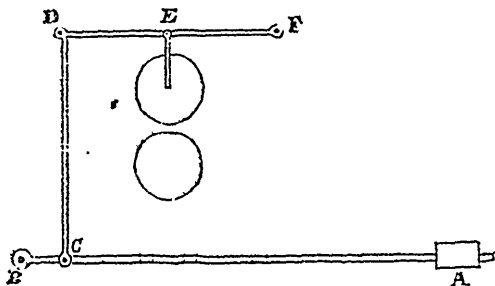


Fig. 11.

The weight A, equals 124 lbs. Its distance from the prop B, is 43 in. and the distance of power C, from the prop is 3 in., therefore $P \times 3 = 1777$ lbs., the power. Calling this the weight in the upper lever, its distance from the prop F equals 17 in., and the distance of power E, from the prop is 9 in., therefore $P \times 9 = 3356$ lbs., the pressure on the flax as it passes through each pair of rollers.

All kinds of flax will not bear the same amount of pressure. This however, is easily varied by moving the weight A, nearer the prop C.

After the flax leaves the rollers it may be treated in different ways which are described in order.

The first is field drying, which is by far the best, if sudden changes of weather were not to be encountered. Even with this drawback it must not be overlooked.



Fig. 12.

A woman puts a band round the top of a bundle of flax after it leaves the rollers; these are laid on a truck, and carried by rail to the field. They are dexterously set on end in a sugar-loaf form (Fig. 12) and known as rickles. In some retteries, the bands are taken off, and the ends opened. When perfectly dry, they are bound and put in stacks.