

Extraction of Sugar from the Juices of Vegetables.

M. Maumené (*Ann. de Chim. et de Phys.*, Sept., 1856), after recalling the well established fact, that a cold solution of sugar gradually changes from cane sugar to grape sugar, and showing that this is the case even when the juice remains in the vegetable, and that hence, a very notable proportion of sugar is lost in manufacture, proposes to remedy this evil by adding to the expressed juices rather more than half the weight of the contained sugar, of slacked lime in powder. His experiments on a small scale, and the application of his method by manufacturers of beet sugar, seem to establish the applicability of his process, which may be of great value to the owners of our sugar plantations.

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Particulars of the Steamers Galveston and Opelousas.

Hull built by J. Simonson, New York. Machinery by the Allaire Works, New York. Owner, C. Vanderbilt, Esq. Intended service, Berwick Bay to Galveston, Texas.

HULL.—

Length on deck,	236 feet.
“ at load line,	230 “
Breadth of beam (molded),	37 “
Depth of hold to spar deck,	12 “ 3 inches.
Draft of water,	6 “ 6 “
Tonnage, hull and engine room,	1000.
Area of immersed section at load draft,	210 sq. ft.
Masts—two—schooner rigged.	

ENGINES—Vertical beam.

Diameter of cylinder,	44 inches.
Length of stroke,	12 feet.
Cut off—at one-half.	

BOILER—One—Return flued.

Breadth of boiler at furnace,	14 feet.
Diameter “ “	10 “ 6 inches.
Height “ exclusive of steam chimney,	10 “ 6 “
Number of furnaces,	three.
Breadth “	4 “ 2 “
Length of grate bars,	6 “
Number of flues or tubes, above, six—below, four.	
Internal diameter of flues or tubes,	16 $\frac{3}{4}$ “
Diameter of smoke pipe,	4 “ 5 “
Height “ “	40 “

WATER WHEELS.—

Diameter over boards,	30 feet.
Length of blades,	6 “ 6 inches.
Depth “	2 “
Number “	twenty-six.

Remarks.—Date of trial, March, 1857. Frames, *molded*, 15 inches, *sided*, 12 inches; 24 inches apart from centres, and strapped with diagonal and double laid braces, $4 \times \frac{1}{2}$ inch. Depth of keel, $6\frac{1}{2}$. One independent steam, fire, and bilge pump. Boiler, chimney and smoke pipe protected from communicating fire by felt and sheet iron. Has a light deck over main deck, which is enclosed at sides. C. H. H.