

SIMMONDS'S
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THE MANUFACTURE OF SUGAR CHEMICALLY CON-
SIDERED.

[WE have been requested by the friends of the author, to republish, for the information of sugar planters in the East, the following remarks on the process of sugar manufacture, which have already appeared in the *Jamaica Dispatch*, and we have much pleasure in complying with the request, not only because the subject is an important and interesting one, but because the writer, in the course of his observations, proceeds to show how objectionable the present system is, and how many of its ill effects may be avoided or modified.—Ed.]

Cane-juice contains many ingredients besides sugar, the principal of which are albumen, gluten, gum, starch, resin, wax, colouring matter, and certain salts, all of which, either collectively or individually, have the power of preventing granulation, as may be proved by their addition to a syrup of pure sugar, which will then defy all attempts to make it crystallise. If, therefore, we want to make good sugar, we must endeavour to free our cane-juice as much as possible from those substances.

Now, cane-juice is no more the sap of the cane, than apple-juice is that of the apple-tree; it is the natural product of the cane, and, in all probability, would contain but a small proportion of these foreign matters if it could be expressed without being accompanied by the sap, they being the natural constituents of the last-named fluid. A patent has, we believe, been lately taken out for separating the cane-juice without the sap. However, in the absence of such an improvement, much may be done by care and attention at the mill; the green bands and trash which usually accompany the canes from the field, should, therefore, be carefully removed before they are passed through, as they contain no saccharine matter, abound in the deleterious substances already mentioned, and communicate a bad colour to the juice; therefore, *the ripe cane only should pass through the mill*. There are but few planters who have not had to contend with sour juice, and they attribute the difficulty they experience in making sugar therefrom, to the presence of acetic acid, or vinegar; but this is quite an erroneous idea, as the acetic acid is very volatile, and evaporates quickly on the application of heat, which may