

immediately over the opening of the return tube or tubes. The edges of this plate must come at least 4 centim. beyond the opening in question.

The end of this tube is fixed by a flanged riveted joint.

§ 4. The outer edges of the circular overflow chamber *F* are at least 5 centim. below the top of the measuring vessel.

§ 5. This chamber slopes down towards the overflow tube or tubes *G* running to the extraction house.

§ 6. From the bottom of the measuring vessel* to the filling level must be 90 centim. at least. The cylindrical part of the vessel is at least two-thirds of its total height.

§ 7. The measuring vessel is surrounded by a cylindrical cage *H* inclosing the overflow chamber.

§ 8. The cage *H* is composed of a frame of iron or iron sheeting, riveted to the exterior of the circular chamber *F*, to which is fastened a stout metal netting having a hundred regular meshes at least per square decimetre.

§ 9. The upper part of the cage *H* is a sheet of iron in which is the man-hole, closed by the cover *I*, secured by a padlock under the control of the Excise officials. This opening is close to lever *N*, which is so made that during filling it locks tap *M* and cover *I* (see § 14).

§ 10. The cover *I* of the man-hole may be opened four times a-day at hours to be stated beforehand in writing. (Article 55 of the Law.)

Manufacturers are advised to perform the operation of cleaning by day only, and as seldom as possible.

§ 11. On the evening before the day fixed for ascertaining the capacity of the measuring vessels they are filled to the very top, and to prove that the top is thus exactly reached they are to be shown with the water remaining in them to the officials, who are to stamp them (the vessels) with a record of their capacity. (Article 36, § 3, of the Law.)

§ 12. Before beginning such test filling a break is made in the communication at that part of the three-way tap *B* on to which is fixed the filling tube *J*; this break is made by loosening the screws fixing the collars.

§ 13. To enable the manufacturer to ascertain the exact quantity of an amount of juice drawn off from the diffusion vessels, two or three gauging taps *K* may be inserted in the walls of the measuring vessels; the interior diameter of the taps *K* is not to exceed 5 millim.

A floating gauge may be used, provided:

1. The rod or chain holding the float passed through a bronze fair-lead riveted on to the measurer; such fair-lead shall not have a greater diameter than is necessary to allow the rod or chain to run;

2. The float may not displace more than 3 litres of juice, and is so made that it can be raised to the level of the liquid when the meter is full.

§ 14. The measuring vessel *A* and the overflow chamber *F* may be washed with water or steam; the manufacturer shall for this purpose fix a washing tube *L* above the upper edge of the measuring vessel; the handle of the tap *M* opening the washing tube is locked during a filling by the lever *N* fixed to the upright *O*. This lever is so made and so placed that during the time of filling it prevents cover *I*, mentioned in § 9, being opened even to the smallest extent.

§ 15. Neither at any part of the cage *H* covering the top of the measuring vessel *A*, nor of the vessel itself, shall there be any opening, however small, other than those provided for in this description of the apparatus.

§ 16. The juice is brought from the extracting house or from the extracting machinery, as the case may be, by one single tube, completely closed, isolated, and clearly visible (Articles 11 and 19 of the Law), forming one single continuous chamber; consequently, if the tube is made in several pieces, the joints shall be soldered rings or collars with two rivets at least not less than 5 millim. through, the heads of which shall be plainly visible; at the measuring house this tube is divided so as to be capable of filling all the measuring vessels.

§ 17. Close to each of these vessels the admission tube is furnished with a tap *P* for making and breaking the connection. The tap *P*, which shall be as described by Article 33 of the Law, is locked by a padlock, which the officials do not remove until the representative of the manufacturer has made, in register No. 315, the declaration to the effect that the measuring vessels are to begin work. (Articles 33 and 46 of the Law.)

* This refers to the general level of the bottom of the vessel, and not to the depression in the middle made to receive the pipe by which the juice is admitted and run out.